



**ANNUAL MONITORING REPORT-
ORDER # R4-2016-0143
(THROUGH DECEMBER 31, 2018)**

**NURSERY GROWERS ASSOCIATION
LOS ANGELES COUNTY
IRRIGATED LANDS GROUP**

January 31, 2019

TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 BACKGROUND	3
3.0 SAMPLING EVENTS.....	4
4.0 WATER QUALITY BENCHMARKS.....	6
4.1 Water Quality Benchmarks.....	7
5.0 INDIVIDUAL SAMPLING SITE RESULTS.....	12
5.1 Interim Sampling Locations.....	13
6.0 SUMMARY OF SAMPLING SITE RESULTS.....	45
6.1 WATER QUALITY BENCHMARK EXCEENDANCES	45
6.2 QUALITY ASSURANCE AND QUALITY CONTROL.....	53
7.0 CURRENT EVENTS/WQMP STATUS.....	54

TABLE OF CONTENTS, CONTINUED

TABLES:

Table 1	Interim Sampling Locations
Table 2	Historical Sampling Timeline
Table 3	List of Constituents for Testing
Table 4	Water Quality Benchmarks, General Chemistry
Table 5	Water Quality Benchmarks, Pesticides, CWIL
Table 6	Additional Water Quality Benchmarks, Pesticides, California Toxic Rule
Table 7	Water Quality Benchmarks, Pesticides, Aquatic Life Benchmarks
Table 8	Water Quality Benchmarks, Field Monitoring and Toxicity
Table 9	Summary of Samples Collected, NGA #19
Table 10	Summary of Samples Collected, NGA #124/125
Table 11	Summary of Samples Collected, NGA #178
Table 12	Summary of Samples Collected, NGA #184
Table 13	Summary of Samples Collected, NGA #150
Table 14	Summary of Samples Collected, NGA #168
Table 15	Summary of Samples Collected, NGA #4
Table 16	Summary of Samples Collected, NGA #176
Table 17	Summary of Samples Collected, NGA #158
Table 18	Summary of Samples Collected, NGA #202
Table 19	Summary of Water Quality Exceedances, General Chemistry
Table 20	Summary of Water Quality Exceedances, Pesticides

TABLE OF CONTENTS, CONTINUED

FIGURES:

Figure 1	Los Angeles Regional Watershed
Figure 1.1	Santa Monica Bay WMA
Figure 1.2	Santa Clara River Watershed
Figure 1.3	Los Angeles River Watershed
Figure 1.4	Dominguez Channel LA/Long Beach Harbors WMA
Figure 1.5	San Gabriel Watershed
Figure 2	Aerial Photograph of NGA #19
Figure 3	Aerial Photograph of NGA #124/125
Figure 4	Aerial Photograph of NGA #178
Figure 5	Aerial Photograph of NGA #184
Figure 6	Aerial Photograph of NGA #150
Figure 7	Aerial Photograph of NGA #168
Figure 8	Aerial Photograph of NGA #4
Figure 9	Aerial Photograph of NGA #176
Figure 10	Aerial Photograph of NGA #158
Figure 11	Aerial Photograph of NGA #202

APPENDICES:

Appendix A	Updated List of LAILG, as of December 31, 2017
Appendix B	Current and Historic Sampling Results
Appendix C	Laboratory Analytical Results and Chain of Custody

ACRONYMS

ABC	Aquatic Bioassay and Consulting Laboratories
ALB	Aquatic Life Benchmark
AMR	Annual Monitoring Report
BMP	Best Management Practice
COC	Chain of Custody
CWIL	Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands
EPA	United States Environmental Protection Agency
GPS	Global Positioning System
LAILG	Los Angeles Irrigated Lands Group
LARWQCB	Los Angeles Regional Water Quality Control Board
MDL	Method Detection Limit
MRP	Monitoring and Reporting Plan
NGA	Nursery Growers Association
OC	Organochlorinated Pesticides
OP	Organophosphate Pesticides
PacRL	Pacific Ridgeline
PP	Pyrethroid Pesticides
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
RPD	Relative Percent Difference
TDS	Total Dissolved Solids
TIE	Toxicity Identification Evaluation
TUC	Toxicity concentration in toxicity units
WMA	Watershed Management Area
WQBs	Water Quality Benchmarks
WQMP	Water Quality Management Plan

**ANNUAL MONITORING REPORT-YEAR FOUR UNDER
ORDER # R4-2016-0143 (THROUGH DECEMBER 31, 2018)**

**NURSERY GROWERS ASSOCIATION
LOS ANGELES COUNTY IRRIGATED LANDS GROUP**

1.0 INTRODUCTION

The NGA is a non-profit association chartered in the late 1950s. The purpose of NGA is to foster and encourage the growth and development of quality nursery stock and to promote all matters that pertain to the best interests of the wholesale nursery growers. NGA developed the LAILG for compliance with the CWIL, which currently consists of Order #R4-2016-0143. PacRL was contracted by NGA to manage the technical aspect of the LAILG.

The LARWQCB is a State of California Agency that regulates water quality within the coastal watershed of Ventura and Los Angeles Counties under the authorities of the Federal Clean Water Act and State Porter Cologne Water Quality Control Act. The area under the jurisdiction of the LARWQCB is known as the Los Angeles Region.

The LAILG has members within the Dominguez Channel LA/Long Beach Harbors WMA, the Los Angeles River Watershed, the San Gabriel River Watershed, the Santa Monica Bay WMA, and the eastern portion of the Santa Clara River Watershed. All five Watersheds and WMAs have impacted waterbodies that appear on the Federal 303(d) list, and listed contaminants include constituents that could be related to agricultural uses.

Water quality impacts associated with agriculture can be primarily traced to discharges resulting from irrigation or stormwater. These discharges may contain pollutants that have been imported or introduced into the irrigation or stormwater; in addition, irrigation practices can mobilize and/or concentrate some pollutants. In order to mitigate these potentially polluted discharges from impacting the beneficial uses of water bodies within the Los Angeles Region, the LARWQCB adopted a CWIL (Order No. R4-2005-0080) on November 3, 2005, as mandated by state law and policy. AMRs submitted by the LAILG during the original CWIL term reported runoff water quality that exceeded established water quality benchmarks.

On October 7, 2010, the LARWQCB adopted a second CWIL for the Los Angeles Region (Order No. R4-2010-0186). Order R4-2010-0186 was extended for an additional year under Order R4-2015-0202. Order R4-2016-0134, adopted on May 19, 2016, slightly revised the program and extended water quality monitoring throughout the Los Angeles Region for an additional four years. Exceedances are to be dealt with by implementing a WQMP that establishes procedures to reduce or eliminate pollutant loading into receiving waters. The goal of this program is to protect and improve water quality and to assist in attaining water quality objectives in the receiving water bodies.

The objective of this AMR is to evaluate compliance with water quality benchmarks established the CWIL and various other water quality programs, and to report findings to the LARWQCB. This AMR describes the monitoring efforts and results that have been undertaken by the NGA for compliance with the CWIL through October 15, 2018, along with presenting historical data collected throughout the life of the program.

2.0 BACKGROUND AND SAMPLING METHODOLOGY

As of December 2018, the LAILG is comprised of 315 sites and an estimated 4,316 total acres and 1,655 irrigated acres. A complete list of current group members enrolled in LAILG is included in Appendix A, and a discussion of current enrollment and group status is discussed in Section 7.0.

LAILG has continued to operate under the basic parameters of the MRP and WQMP developed for Order R4-2010-0186, with the goal of gathering enough information to properly apply the WQMP methodology to develop a new MRP for Order R4-2016-0134. This methodology includes edge of field sampling at select grower locations that are representative of the group. During this interim sampling period, LAILG is focusing sampling efforts to address locations where previous samples have been collected and WQO exceedances have been observed, along with newer facilities enrolled in the program. Sampling sites that were chosen for this interim period are presented on Table 1. A running log of all locations sampled since the inception of the program, along with sampling dates and site status is included in Appendix B. Maps presenting currently enrolled members and sampling locations are presented as Figures 1.0-1.5.

Table 1 - Interim Sampling Locations

NAME	SITE #	APPROXIMATE GPS LOCATION	ADDRESS	ACRES IRRIGATED	CROP TYPE
ABC Nursery, Inc.	4	N 33° 52' 55.7" W 118° 16' 06.0"	424 E. Gardena Boulevard Gardina, CA	11.51	General Ornamentals
Boething Treeland Farms, Inc.	19	N 34° 09' 51.1" W 118° 38' 20.7"	23475 Long Valley Road Woodslend Hills, CA	14.68	General Ornamentals
H&H Nursery *	64	N 33° 52' 07.1" W 118° 08' 32.4"	6220 Lakewood Boulevard Lakewood, CA	2.50	Retail / Multiple
Norman's Nursery	125	N 34° 05' 42.3" W 118° 04' 53.5"	8550 E Broadway San Gabriel, CA	7.00	General Ornamentals
Colorama Wholesale-Nursery	150	N 34° 08' 27.5" W 117° 55' 35.9"	1025 N. Todd Ave. Asuza, CA	15.30	Color Plants
Sakaida Nursery, Inc.	158	N 34° 06' 49.0" W 118° 04' 54.8"	8538-8601 Longden Ave San Gabriel, CA	6.89	General Ornamentals
SY Nursery Inc.	168	N 33° 50' 59.2" W 118° 04' 36.0"	19900 S Pioneer Blvd Cerritos, CA	4.75	General Ornamentals
T-Y Nursery	176	N 33° 51' 18.7" W 118° 23' 10.9"	Between Flagler/Paulina Redondo Beach, CA	7.50	General Ornamentals
Ultra Greens Nursery	178	N 34° 17' 57.4" W 118° 25' 06.5"	13102 Maclay Street Sylmar, CA	8.50	General Ornamentals
Valley Sod Farms, Inc.	184	N 34° 13' 23.1" W 118° 29' 34.5"	16405 Chase Street North Hills, CA	36.00	Sod
El Nativo Growers	202	N 34° 06' 38.2" W 117° 56' 26.4"	200 S. Peckham Azusa, CA	7.00	General Ornamentals

* H&H added for interim sampling at during 4th Quarter of 2017, as Site #150 was no longer in operation.

3.0 SAMPLING EVENTS

During the wet season of this reporting period, which lasted from October 15, 2017 through May 14, 2018, interim sampling sites listed in Table 1 were divided into groups and visited on January 9, 2018 and March 22, 2018. On January 9, 2018, a total of four of the five sites had sufficient runoff to conduct sampling, and on March 22, 2018, four of five sites were sampled.

During the dry season of this reporting period, which lasted from May 15, 2018 through October 14, 2018, all interim sampling sites listed in Table 1 were visited on September 13 and September 18, 2018. All sites were visited during normal operating hours with visits lasting for one hour or for a complete watering cycle, whichever was greater. During the visits, irrigation watering practices were observed and noted. Inspections included communicating with site operators regarding recently implemented BMPs at each site and verifying BMPs that had been implemented in the past. Irrigation runoff was not observed and samples were not collected at any of the selected sites visited during the dry season. Photographs were taken at each site, and each site visited is discussed in Section 5.

A total of 90 samples have been collected by LAILG during the life of the program. Over half of the samples were collected during the first two years of the program, prior to the suspension of the monitoring group. Collected samples have historically been from storm water runoff during the wet season; irrigated runoff from the dry season has not been encountered since 2008. This is in part due to a concerted effort by LAILG to educate growers on field conditions that were observed during sampling events, to eliminate dry season runoff. A summarized history of collected samples is presented on Table 2. A complete history of collected samples is presented in Appendix B.

Table 2 – Historical Sampling Timeline

	CWIL Order # R4-2005-0080														Total	
	YEAR 1 ¹				YEAR 2 ²				YEAR 3				YEAR 4			
	Dry Season		Wet Season		Dry Season		Wet Season		Dry Season		Wet Season		Dry Season		Wet Season	
	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2
Samples Collected	5	3	14	8	2	1	8	11	0	ns*	0	ns*	52			
Sites Visited	16	16	16	16	14	14	18	18	18	N/A	18	N/A	164			

1 Wet Season sampling events took place over five storms due to localized rain patterns and a general lack of uniform storm intensity and duration.

2 Wet Season sampling events took place during two storm days where all sites were visited.

	CWIL Order # R4-2010-0186																Total		
	Interim Sampling Event ³	YEAR 1				YEAR 2				YEAR 3				YEAR 4					
		Dry Season		Wet Season		Dry Season		Wet Season		Dry Season		Wet Season		Dry Season		Wet Season			
		March 2011	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #2	Event #1	Event #2								
Samples Collected		4	0	0	4	4	0	0	0	0	0	5	0	0	0	2	1	22	
Sites Visited		4	5	5	5	5	5	na	na	5	5	5	na	5	5	5	5	84	

3 The previous CWIL (Order R4-2005-0080) was replaced on October 7, 2010 with the adoption of a new Waiver (Order R4-2010-0186). As a good faith measure, the LAILG conducted a sampling event during the wet season between the execution of the new CWIL and the required submittal date of an MRP on April 7, 2011.

	CWIL Order # R4-2016-0143												Total		
	YEAR 1 ⁴				YEAR 2 ⁴				YEAR 3 ⁴						
	Dry Season		Wet Season		Dry Season		Wet Season		Dry Season		Event #1				
	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	
Samples Collected	0	0	3	5	0	0	4	4	0	0	16				
Sites Visited	5	5	5	5	5	5	5	5	5	5	50				

4 Sites were sampled in the interim based on the MRP from CWIL Order R4-2010-0186.

4.0 WATER QUALITY BENCHMARKS

Samples were collected and analyzed as presented in the MRP and QAPP developed for Order R4-2010-0186. Table 3 presents the list of constituents analyzed during this reporting period.

Table 3 - List of Constituents for Testing

CONSTITUENT	UNITS	FIELD/LABORATORY TEST
Flow	Cubic feet per second	Field
pH	pH units	Field
Temperature	°F	Field
Dissolved Oxygen	mg/L	Field
Turbidity	NTU	Field
Total Dissolved Solids	mg/L	Laboratory
Total Suspended Solids	mg/L	Laboratory
Hardness (as CaCO ₃)	mg/L	Laboratory
Chloride	mg/L	Laboratory
Ammonia	mg/L	Laboratory
Nitrate-Nitrogen	mg/L	Laboratory
Phosphate	mg/L	Laboratory
Sulfate	mg/L	Laboratory
Total Copper	ng/L	Laboratory
Organophosphate Suite ¹	ng/L	Laboratory
Organochlorines Suite ²	ng/L	Laboratory
Toxaphene	ng/L	Laboratory
Pyrethroids	ng/L	Laboratory
Toxicity	TU _c ³	Laboratory
Trash	Observations	Field

¹ Organophosphate Suite: Bolstar, Chlorpyrifos, Demeton, Diazinon, Dichlorvos, Dimethoate, Disulfoton, Ethoprop, Fenchlorophos, Fensulfothion, Fenthion, Malathion, Merphos, Methyl Parathion, Mevinphos, Phorate, Tetrachlorvinphos, Tokuthion, Trichloronate.

² Organochlorine Suite: 2,4' - DDD, 2,4' - DDE, 2,4' DDT, 4,4' -DDD, 4,4' -DDE, 4,4' -DDT, Aldrin, BHC-alpha, BHC-beta, BHC-delta, BHC-gamma, Chlordane-alpha, Chlordane-gamma, Dieldrin, Endosulfan sulfate, Endosulfan-I, Endosulfan-II, Endrin, Endrin Aldehyde, Endrin Ketone.

³ Chronic Toxic Unit is the reciprocal of the sample concentration that caused no observable effect on the test organism by the end of a chronic toxicity test.

mg/l	milligrams per liter
ng/L	nanograms per liter
°F	degrees Fahrenheit
TU _c	chronic toxic unit
NTU	nephelitic turbidity units

4.1 Water Quality Benchmarks

The following tables present water quality benchmarks that apply to this program for the sites that are currently being sampled. They are derived from language included in Appendix 4 of the current Waiver, along with the Water Quality Control Plan Los Angeles Region (Basin Plan) objectives, California Toxics Rule benchmarks, USEPA ALB guidelines, and CCR Title 22 maximum contamination levels for municipal water (organic chemicals).

For the purpose of analysis, benchmarks are broken into four general groups: general chemistry (including nutrients), pesticides, toxicity, and field monitoring results.

General Chemistry

General Chemistry water quality objectives for each site were obtained from the *Water Quality Control Plan, Los Angeles Region*. To choose the most appropriate water quality objectives for each site, all sites were assumed to drain through storm drains that ran perpendicularly to the closest blue line stream. The most relevant stream reach and related water quality objectives were chosen for each site using this assumption. Table 4 outlines the site-specific water quality objectives and associated fixed sampling sites used to evaluate general chemistry results for this report.

Table 4 - Water Quality Benchmarks, General Chemistry

Watershed/stream reach	NGA Site #	Ammonia	TDS	Sulfate	Chloride	Nitrogen	TSS	Copper ($\mu\text{g/L}$)	Phosphate
Los Angeles River:									
Above Figueroa St.	19, 184	a)	950	300	150	8	—	$\text{CCC}=0.960e^{[(0.8545(\text{in (hardness)}))+(-1.702)]}$	—
Rio Hondo above Santa Ana Freeway	125, 158	a)	750	300	150	8	—	$\text{CCC}=0.960e^{[(0.8545(\text{in (hardness)}))+(-1.702)]}$	—
Pacoima Wash above Pacoima spreading grounds	178	a)	250	30	10	MUN	—	$\text{CCC}=0.960e^{[(0.8545(\text{in (hardness)}))+(-1.702)]}$	—
San Gabriel River:									
Between Firestone Blvd. and San Gabriel River Estuary	168	a)	MUN				—	$\text{CCC}=0.960e^{[(0.8545(\text{in (hardness)}))+(-1.702)]}$	—
Between Morris Dam and Ramona Blvd.	150, 202	a)	450	100	100	8	—	$\text{CCC}=0.960e^{[(0.8545(\text{in (hardness)}))+(-1.702)]}$	—
Dominguez Channel	4	a)	MUN				—	$\text{CCC}=0.960e^{[(0.8545(\text{in (hardness)}))+(-1.702)]}$	—
Santa Monica Bay	176	a)	MUN				—	$\text{CCC}=0.960e^{[(0.8545(\text{in (hardness)}))+(-1.702)]}$	—
USEPA Municipal Drinking Water Standards	a)	500	250	400	10	—		1.3 (mg/L)	—

* All limits are recorded for milligrams per liter (mg/L)

a) Limit varies, see Water Quality Control Plan, Los Angeles Region

MUN No site specific objectives have been established. Objectives are based on USEPA guidelines for municipal drinking water standards.

— No numeric benchmarks, water quality benchmarks shall be based on the surface water and groundwater basin objectives currently contained in the Water Quality Control Plan Los Angeles Region (Basin Plan) or other applicable water quality standards established for the Los Angeles Region.

Pesticides

Pesticide water quality objectives were taken from the Waiver, USEPA ALB guidelines, and the California Toxics Rule. Table 5 presents pesticide benchmarks outlined in the Waiver. Table 6 presents OC pesticide benchmarks outlined by the California Toxics Rule.

Table 5 - Water Quality Benchmarks, Pesticides, CWIL

CONSTITUENT	UNITS	WATER QUALITY BENCHMARK
Chlordane	µg/L	0.00059
4,4' - DDT	µg/L	0.00059
4,4' - DDD	µg/L	0.00084
DDE	µg/L	0.00059
Dieldrin	µg/L	0.00014
Toxaphene	µg/L	0.00075
Chlorpyrifos	µg/L	0.025
Diazinon	µg/L	0.10

µg/L micrograms per liter

Table 6 - Additional Water Quality Benchmarks, Pesticides, California Toxics Rule

CONSTITUENT	UNITS	WATER QUALITY BENCHMARK
		Human Health (30-day Average) Drinking Water Sources (consumption of water and aquatic organisms)
Aldrin	ug/L	0.00013
alpha-BHC	ug/L	0.0039
beta-BHC	ug/L	0.014
gamma-BHC (Lindane)	ug/L	0.019
Endosulfan and derivatives	ug/L	110
Endrin	ug/L	0.76
Endrin aldehyde	ug/L	0.76
Heptachlor	ug/L	0.00021
Heptachlor epoxide	ug/L	0.0001

Table 7 presents ALB benchmarks for OP and pyrethroid pesticides. Any pesticide that exceeded the value reported for acute invertebrates were considered a water quality exceedance for LAILG evaluation purposes. The guidelines for acute invertebrates were chosen because historically the most sensitive species in toxicity testing was Ceriodaphna dubia, a species of water flea. The CWIL does not directly cover benchmarks for these constituents, and does not specifically require ALB benchmarks to be considered as WQBs.

Table 7 - Water Quality Benchmarks, Pesticides, Aquatic Life Benchmarks

OPP Aquatic Life Benchmarks ($\mu\text{g} / \text{L}$) (Freshwater)

Pesticides	Footnote	CAS Number	Fish		Invertebrates		Nonvascular Plants	Vascular Plants	Office of Water Aquatic Life Criteria	
			Acute 1	Chronic 2	Acute 3	Chronic 4	Acute 5	Acute 6	Maximum Concentration (CMC)	Continuous Concentration (CCC)
OP Pesticides										
Azinphos Methyl	9	86-50-0	0.18	0.44	0.08	0.25	—	—	—	—
Chlorpyrifos		2921-88-2	0.90	0.57	0.05	0.04	140	—	—	—
Coumaphos	10	56-72-4	170	11.7	0.037	0.0337	—	166	—	—
Dichlovos (DDVP)		62-73-7	91.5	5.2	0.035	0.0058	14,000	—	0.083	0.041
Dimethoate	9	60-51-5	3100	430	21.5	0.5	20,000	>92,600	—	—
Disulfoton	9	298-04-4	19.5	3	1.95	0.01	—	—	—	—
Ethoprop		13194-48-4	150	24	22	0.8	8,400	—	—	—
Fenthion	8	55-38-9	415	7.5	2.6	0.013	400	>2,800	—	—
Malathion		121-75-5	2.05	8.6	0.049	0.060	2,400	24,000	—	0.1
Methyl Parathion	13	298-00-0	925	< 10	0.485	0.25	15,000	18,000	—	—
Naled		300-76-5	46	2.9	0.07	0.045	25	>1,800	—	—
Phorate	8	298-02-2	1.175	0.34	0.3	0.21	>1,300	—	—	—
Pyrethroid Pesticides										
Allethrin		584-79-2	3.9	—	1.05	—	—	—	—	—
Bifenthrin		82657-04-3	0.075	0.04	0.8	0.0013	—	—	—	—
Cyfluthrin		68359-37-5	0.034	0.01	0.0125	0.0074	>181	—	—	—
Cypermethrin		52315-07-8	0.195	0.14	0.21	0.069	—	—	—	—
Fenpropathrin (Danitol)		64257-84-7	1.1	0.06	0.265	0.064	—	—	—	—
Deltamethrin		52918-63-5	0.29	0.017	0.055	0.0041	—	—	—	—
Esfenvalerate	9	66230-04-4	0.035	0.035	0.025	0.017	—	—	—	—
Lambda-cyhalothrin		91465-08-6	0.039	0.031	0.0035	0.002	>310	—	—	—
Pendimethalin		40487-42-1	69	6.3	140	14.5	5.2	12.5	—	—
Permethrin	16	52645-53-1	0.395	0.0515	0.0195	0.0014	68	—	—	—
Prallethrin		23031-36-9	6	3	3.1	0.65	—	>1,324	—	—
Sumithrin		26002-80-2	7.9	1.1	2.2	0.47	—	—	—	—
Tefluthrin		79538-32-2	0.03	0.004	0.035	0.008	—	—	—	—

Limits Reported in ug/L

⁸ Because the underlying toxicity value is a "greater-than" value (such as >265,000), this benchmark may overestimate toxicity.

⁹ The chronic benchmark is based on the acute toxicity value (which was lower than the lowest available chronic toxicity value), and therefore may underestimate chronic

¹⁰ Although the underlying acute toxicity value is greater than or equal to the chronic toxicity value, the acute benchmark is lower than the chronic benchmark because acute and chronic toxicity values were multiplied by LOC values of 0.5 and 1, respectively.

¹³ Because the underlying toxicity value is a "less-than" value (such as <1,500), this benchmark may underestimate toxicity.

¹⁶ Toxicity values and benchmarks apply to permethrin. If monitoring data represent only the *cis* isomer of permethrin in water, comparison with benchmarks may underestimate potential toxicity.

Toxicity

Toxicity water quality objectives were determined as outlined in the MRP and QAPP, and through communications with ABC laboratory. Because tests are run on 100% concentration of samples (no dilution water), numerical values of TUC cannot be accurately determined. Due to the lack of TUC values, a TIE was generally run on samples that exhibited a high mortality. Chronic toxicity testing is conducted for *Pimephales promelas* (fathead minnow), *Ceriodaphnia* (water flea), and *Selenastrum capricornutum* (green algae). During this waiver period, *Ceriodaphnia* has been the most sensitive species and was the only species tested this sampling year.

Adequate sample volume was collected during sampling events so that TIE procedures could be initiated as soon as possible after toxicity was observed. TIE testing was only initiated if initial testing indicated the presence of significant toxicity in the sample. For the purpose of triggering TIE procedures, significant toxicity was defined as at least 50 percent mortality or a 50 percent reduction in growth. The 50 percent threshold is consistent with the approach recommended in guidance published by the EPA for conducting TIEs, which recommends a minimum threshold of 50 percent mortality because the probability of completing a successful TIE decreases rapidly for samples with less than this level of toxicity.

Field Monitoring

For field monitoring results, the Basin Plan for the Los Angeles Region contains narrative objectives for certain chemicals, most notably: biostimulator substances, temperature, pH, turbidity, and Total Suspended Solids. Table 8 presents field monitoring and toxicity benchmarks, as outlined in the Los Angeles Basin Plan. These narrative objectives contain verbiage stating that the natural or ambient conditions of receiving waters are not to be altered by discharges, including some of the constituents listed above. This is problematic, as natural or ambient conditions have not been established in many receiving waters, and discharges from growing operations in the urban Los Angeles Region drain primarily to storm drains. The ultimate endpoint of these storm drains are not well mapped or established, and are comingled with discharges from a number of land use types. Due to the difficulty in ascertaining the impacts to receiving waters, it is assumed in this report that discharges do not affect the receiving water bodies in a large enough magnitude to alter natural or ambient conditions.

Table 8 - Water Quality Benchmarks, Field Monitoring and Toxicity

Constituent	Narrative Objective	Applicable Benchmarks
pH	The pH of inland surface water shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed by more than 0.5 pH units from natural conditions as a result of waste discharges.	$6.5 \leq \text{pH} \leq 8.5$ Changes to ambient receiving water conditions are not assessed; "ambient" or "natural" conditions have not been established
Temperature	For water designated WARM, water temperature shall not be altered by more than 5°F above natural temperature. At no time shall WARM-designated waters be raised above 80°F as a result of water discharge	WARM: $\leq 80^{\circ}\text{F}$ Changes to ambient receiving water conditions are not assessed; "ambient" or "natural" conditions have not been established
	For waters designated as COLD, water temperature shall not be altered by more than 5°F above the natural temperature.	COLD: No numeric benchmark. Changes to ambient receiving water conditions are not assessed; "ambient" or "natural" conditions have not been established.
Dissolved Oxygen	No single dissolved oxygen determination shall be less than 5 mg/L, except when natural conditions cause lesser concentrations.	$\geq 5 \text{ mg/L}$
	The dissolved oxygen content of all surface waters designated as WARM shall not be depressed below 5 mg/L as a result of waste discharge.	WARM: $\geq 5 \text{ mg/L}$
	The dissolved oxygen content of all surface waters designated as COLD and SPWN shall not be depressed below 7 mg/L as a result of waste discharge.	COLD, SPWN: $\geq 7 \text{ mg/L}$
Turbidity	Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attribute to controllable water quality factors shall not exceed the following limits: Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.	No Numeric benchmarks. Changes to ambient receiving water conditions are not assessed; "ambient" or "natural" conditions have not been established.
Toxicity	All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal or aquatic life. There shall be no chronic toxicity in ambient waters outside mixing zones.	$\leq 1.0 \text{ TUc}^{[3]}$
Biostimulator Substances	Waters shall not contain biostimulator substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affect beneficial uses.	No Numeric benchmarks. Nutrients listed on Table X.
Total Suspended Solids (TSS)	Wastes shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.	No numeric benchmarks.

5.0 INDIVIDUAL SAMPLING SITE RESULTS

This section presents current and historical sampling events on a site by site basis for sampling sites sampled during this sampling year. Information includes: a summary of detected constituents from water quality sampling, photographs from visits conducted during the most recent site visits and sampling, site maps, and basic site information. All current interim sampling sites are included in this section. Samples collected from sampling sites that are no longer operating or are from previous sampling sites not included as part of the interim sampling protocol are included in the evaluation presented in Section 7 and in Appendix B, but are not presented in this section.

A complete tabulated summary of results from this sampling year, along with historical sampling results, is presented in Appendix B. Laboratory analytical results for samples collected during this sampling year are included in Appendix C.

5.1 Interim Sampling Locations

NGA SITE #19

Previous Sampling Group: Group 1

Previous Sampling Frequency - Fixed

Total / Irrigated Acres: 32.0/14.7 Acres

Sample site GPS location: N 34° 09' 51.1" W 118° 38' 2.07"

March 22, 2018, wet season, sample collected



September 13 2018, dry season, no sample collected



Site Drainage - The main area of the site drains eastward onto Valley Circle Boulevard. Based on site topography, the eastern edge of the site along Valley Circle Boulevard was chosen as the sampling location.

Sampling - Nine samples collected to date. This site was visited during the second wet season sampling event and the first dry season sampling event during this sampling year, and a sample was collected on March 22, 2018.

Historical sampling results for this site are presented in Table 9.

Aerial photography of the site is presented on Figure 2.

Table 9 - Summary of samples collected, NGA #19

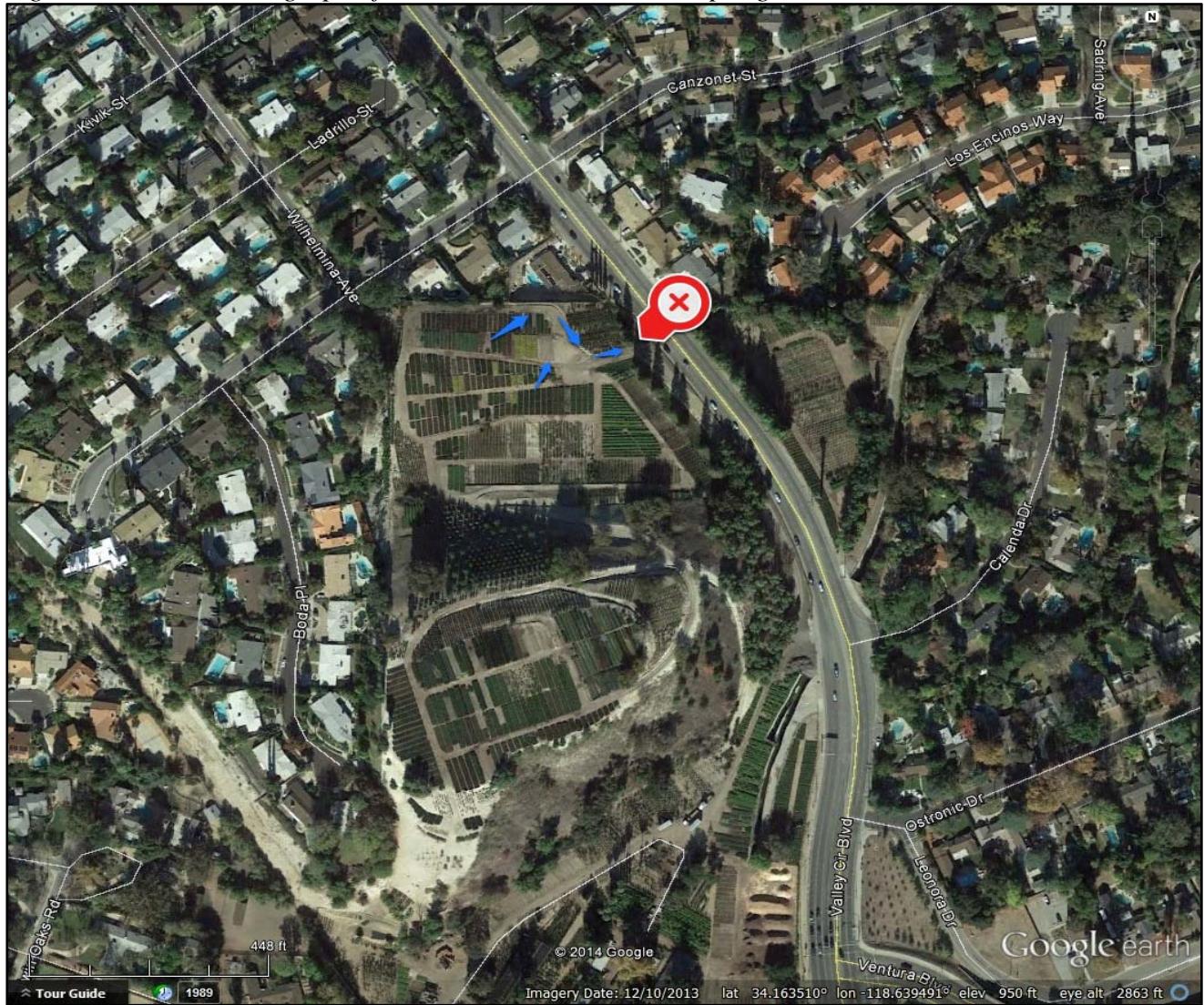
Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #19	NGA-#19-LAILG-1	8/13/07	1	108.57	2,2882	10.84	118.85	2.68	772	4.62	5.09	568	na	na	na
NGA #19	LAILG-NGA#19-2	12/18/07	1.4	162.66	11,2352	86.7	290.99	2.13	1,292	4.01	5.544	684	na	na	na
NGA #19	LAILG-NGA19-3	1/5/08	0.12	157.52	0.2125	0.44	451.78	0.96	1,030	1.26	1.173	84	na	na	na
NGA #19	LAILG-NGA 19-4	8/12/08	0.03	104.03	1,1877	12.65	107.33	1.75	834	1.86	15.494	213	na	na	na
NGA #19	LAILG-NGA 19-5	11/26/08	0.96	115.72	1,507	26.94	126.35	1.356	748	4.69	4.884	995	na	na	na
NGA #19	LAILG-NGA 19-6	3/23/11	0.54	110	0.86	55	250	1.1	1,200	0.860	3.4	550	440	180	0.090
NGA #19	LAILG-NGA 19-7	2/28/14	1.4	120	2.40	53	160	2.8	1,000	2.40	4.7	650	319	128	0.056
NGA #19	LAILG-NGA-19-8	1/20/17	0.31	42	0.780	25	61	0.82	700	0.78	2.7	430	163	65.2	0.047
NGA #19	LAILG-NGA-19-9	3/22/18	0.53	140	0.480	93	150	0.54	1,400	0.48	3.3	760	434	174	0.060

Site	Sample #	Date	OC Pesticides (ng/L)		OP Pesticides (ng/L)			Pyd Pesticides (ng/L)
			Total DDT and Derivatives	Total Chlordane	Chlorpyrifos	Diazinon	Malathion	
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	nd	nd	nd	nd	0
NGA #19	LAILG-NGA#19-2	12/18/07	nd	2.4	nd	15	2,291.3	1,814
NGA #19	LAILG-NGA19-3	1/5/08	5.6	14	nd	nd	nd	6.8
NGA #19	LAILG-NGA 19-4	8/12/08	nd	1.3	nd	nd	nd	91.8
NGA #19	LAILG-NGA 19-5	11/26/08	24.7	6.6	130.1	32.6	nd	2,236.2
NGA #19	LAILG-NGA 19-6	3/23/11	nd	nd	25	nd	nd	29
NGA #19	LAILG-NGA 19-7	2/28/14	nd	nd	22	nd	nd	30
NGA #19	LAILG-NGA-19-8	1/20/17	nd	nd	nd	nd	nd	64
NGA #19	LAILG-NGA-19-9	3/22/18	nd	nd	nd	nd	nd	78

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 2 – Aerial Photograph of NGA #19 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

NGA SITE #124/125

Previous Sampling Group: Group 1
Previous Sampling Frequency - Fixed
Total/Irrigated Acres: 10.4/8.3 Acres
Sample site GPS location: N 34° 05' 56.9" W 118° 04' 56.0"

January 9, 2018, wet season, sample collected



September 18, 2018, dry season, no sample collected



Site Drainage - The site drains southward into a gravel bed along the southern border of the property, near the railroad tracks. Based on drainage and runoff indicators, the south/southwest edge of the property was chosen as the sampling location.

Sampling - Nine samples collected to date. This site was visited during the first wet season sampling event and second dry season sampling event during this sampling year, and a sample was collected on January 9, 2018.

Historical sampling results for this site are presented in Table 10.

Aerial photography of the site is presented on Figure 3.

Table 10 - Summary of samples collected, NGA #124

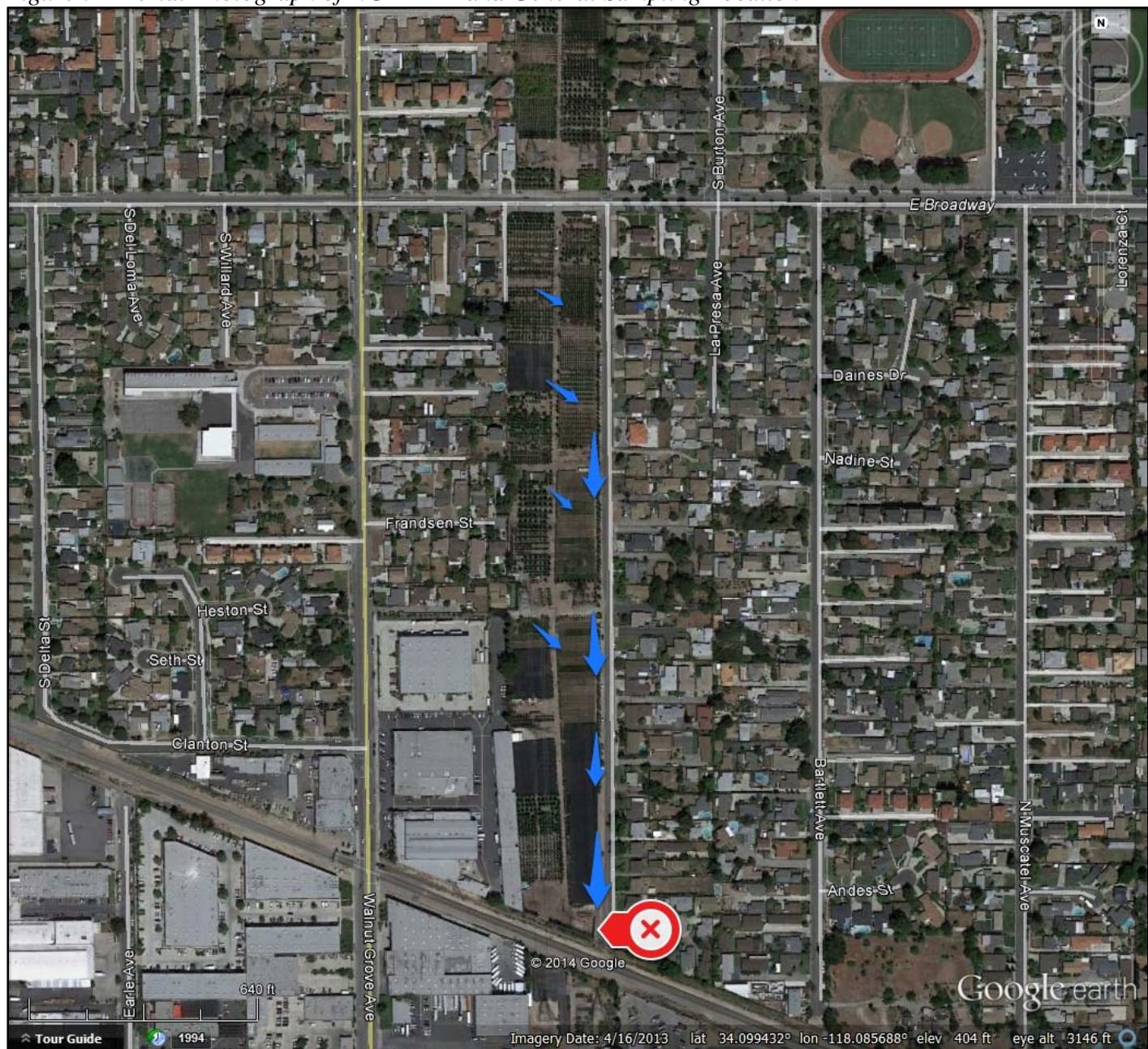
Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #124	NGA-#124-LAILG-1	8/13/07	9.8	69.23	3.5006	72.48	206.25	4.31	1,002	3.96	4.627	99.5	na	na	na
NGA #124	NGA-#124-LAILG-2	12/7/07	4.6	33.03	3.9247	45.41	59.24	2.9	550	2.76	3.168	90	na	na	na
NGA #124	LAILG-NGA#124-3	1/5/08	15.5	28.3	0.9814	28.34	57.68	1.66	378	1.66	2.228	40	na	na	na
NGA #124	LAILG-NGA#124-4	11/26/08	0.48	37.78	2.595	28.36	84.22	2.975	568	2.53	3.297	117	na	na	na
NGA #124	LAILG-NGA 124-5	12/15/08	1.68	26.51	24.4087	40.43	45.28	21.115	424	3.66	2.706	115.5	na	na	na
NGA #124	LAILG-NGA 124-6	3/21/11	0.36	9.4	1.8	6.7	24	1.8	240	1.800	2.7	620	61	24	0.045
NGA #124	LAILG-NGA 124-7	2/28/14	4.5	21	1.200**	13	100	1.5	420	1.2	2.2	160	125	50.2	0.049
NGA #124	LAILG-NGA-124-8	2/17/17	0.50	7.6	0.77**	3.8	70	0.73*	270	0.76**	3.9	740	120	48.1	0.120
NGA #124	LAILG-NGA-124-9	1/9/18	4.10	44	1.9	1.0	270	2	840	1.80	3.0	150	327	131	0.059

Site	Sample #	Date	OC Pesticides (ng/L)			OP Pesticides (ng/L)		Pyd Pesticides (ng/L)
			Total DDT and Derivatives	Dieldrin	Total Chlordane	Chlorpyrifos	Malathion	
NGA #124	NGA-#124-LAILG-1	8/13/07	51.5	na	34	nd	nd	136.9
NGA #124	NGA-#124-LAILG-2	12/7/07	37.4	na	11.4	nd	nd	3,704.3
NGA #124	LAILG-NGA#124-3	1/5/08	nd	na	17.1	nd	nd	1,898.6
NGA #124	LAILG-NGA#124-4	11/26/08	19.3	na	8.2	nd	nd	7,536.1
NGA #124	LAILG-NGA 124-5	12/15/08	10.4	na	13.6	nd	85.3	19,281.3
NGA #124	LAILG-NGA 124-6	3/21/11	nd	33	nd	10	nd	169.8
NGA #124	LAILG-NGA 124-7	2/28/14	nd	nd	nd	17	13	3,916
NGA #124	LAILG-NGA-124-8	2/17/17	nd	nd	nd	nd	nd	4,890
NGA #124	LAILG-NGA-124-9	1/9/18	nd	nd	nd	nd	nd	226

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 3 – Aerial Photograph of NGA #124 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

NGA SITE #178

Previous Sampling Group: Group 1
Previous Sampling Frequency - Fixed
Total/Irrigated Area: 10.0/8.5 Acres
Sample site GPS location: N 34° 17' 57.42" W 118° 25' 06.46"

January 9, 2018, wet season, sample collected



September 18, 2018, dry season, no sample collected



Site Drainage - The drainage gradient flows to the south, through a channel that crosses the property. Based on drainage properties, the end of the channel was identified as the anticipated sampling location.

Sampling - Four samples collected to date. This site was visited during the first wet season sampling event and the second dry season sampling event during this sampling year, and a sample was collected on January 9, 2018.

Historical sampling results for this site are presented in Table 11.

Aerial photography of the site is presented on Figure 4.

Table 11 - Summary of samples collected, NGA #178

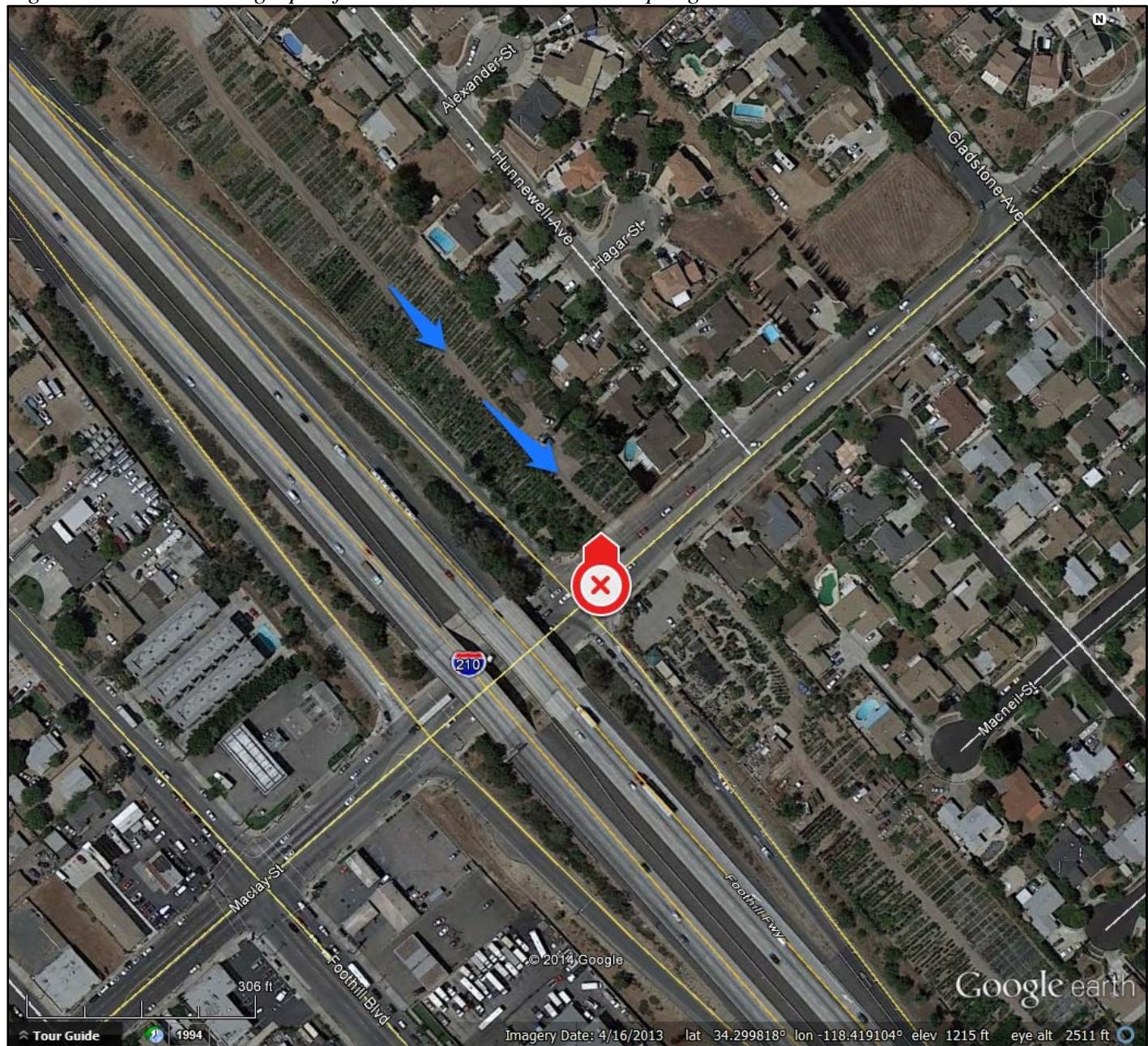
Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #178	LAILG-NGA 178-1	12/15/08	0.81	85.04	2.4077	12.99	148.27	2.648	462	2.64	2.934	72.7	na	na	na
NGA #178	LAILG-NGA 178-2	2/28/14	0.87	120	2.2	10	370	2.4	940	2.2	3.6	270	324	130	0.030
NGA #178	LAILG-NGA-178-3	2/17/17	0.58	74	1.3	0.55	200	1.3*	720	1.3	13	2900	431	173	0.37
NGA #178	LAILG-NGA-178-4	1/9/18	0.48	87	2.400	3.9	100	2.4	520	2.4	5.6	930	172	69	0.073

Site	Sample #	Date	OC Pesticides (ng/L)	OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
			Total DDT and Derivatives	Total sum of all detected Pyrethroids	
NGA # 178	LAILG-NGA 178-1	12/15/08	25.3	No OP Pesticides Detected	4.9
NGA # 178	LAILG-NGA 178-2	2/28/14	nd		40
NGA #178	LAILG-NGA-178-3	2/17/17	nd		20
NGA #178	LAILG-NGA-178-4	1/9/18	nd		nd

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 4 – Aerial Photograph of NGA #178 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

NGA SITE #184

Previous Sampling Group: Group 1
Previous Sampling Frequency - Fixed
Total/Irrigated Area: 36.0/36.0 Acres
Sample site GPS location: N 34° 13' 29.41" W 118° 29' 22.83"

January 9, 2018, wet season, sample collected



September 18, 2018, dry season, no sample collected



Site Drainage - The site is split into three lots, with the northern section selected as the sampling location based on site topology and drainage patterns. The northern section is a five-acre lot with a drainage gradient flowing to the north. Water flows into a drainage ditch along the eastern side of the property and flows south onto Chase Street. Based on drainage properties, the point of exit from the property onto Chase Street was identified as the anticipated sampling location.

Sampling - Four samples collected to date. This site was visited during the first wet season sampling event and the second dry season sampling event during this sampling year, and a sample was collected on January 9, 2018.

Historical sampling results for this site are presented in Table 12.

Aerial photography of the site is presented on Figure 5.

Table 12 - Summary of samples collected, NGA #184

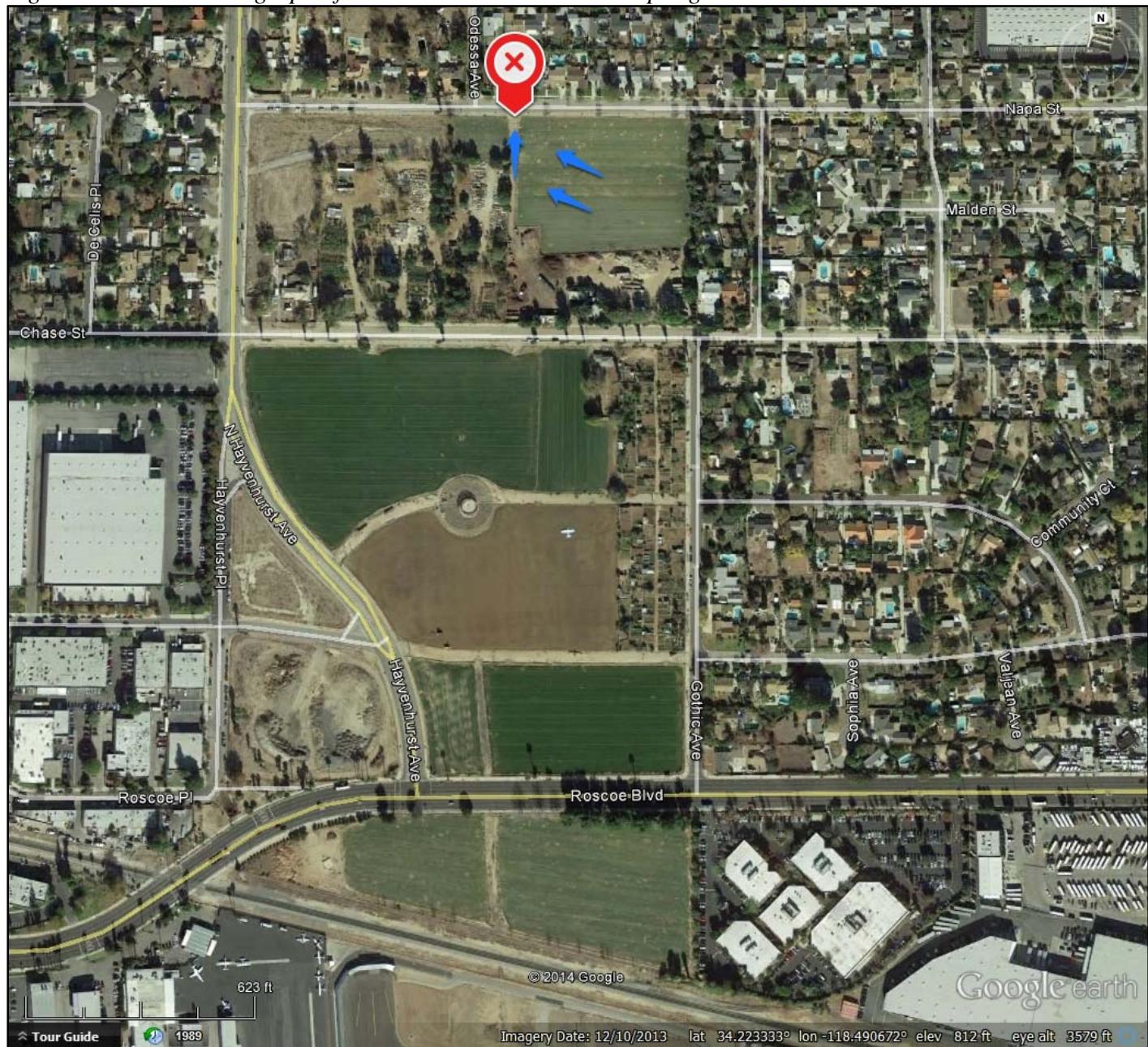
Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #184	LAILG-NGA 184-1	11/26/08	0.46	31.44	0.609	3.12	17.92	0.643	206	0.88	1.3	129.5	na	na	na
NGA #184	LAILG-NGA 184-2	12/15/08	0.64	27.46	0.7339	4.41	33.57	0.502	240	2.16	2.94	1,079	na	na	na
NGA #184	LAILG-NGA 184-3	2/28/14	0.23	2.5	0.33	0.4	1.6	0.44	41	0.33	0.72	160	13.8	5.54	0.0079
NGA #184	LAILG-NGA-184-4	1/9/18	7.4	23	1.500	1.3	61	1.7	240	1.5	10	230	104	41.8	0.110

Site	Sample #	Date	OC Pesticides (ng/L)		OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
			Total DDT and Derivatives	Total Chlordane		
NGA #184	LAILG-NGA 184-1	11/26/08	nd	nd	No OP Pesticides Detected	3.1
NGA #184	LAILG-NGA 184-2	12/15/08	22	4.2		30.7
NGA #184	LAILG-NGA 184-3	2/28/14	nd	nd		2.5
NGA #184	LAILG-NGA-184-4	1/9/18	nd	nd		352

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 5 – Aerial Photograph of NGA #184 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

NGA SITE #150

NGA Site #150 is no longer in operation.

NGA SITE #168

Previous Sampling Group: Group 3
Previous Sampling Frequency - Fixed
Total/Irrigated Acres: 6.0/4.75 Acres
Sample site GPS location: N 33° 51' 3.2" W 118° 4' 55.2"

March 22, 2018, wet season, sample collected



September 13, 2018, dry season, no sample collected



Site Drainage - The site drains to the east of the property through drainage ditches and runs into Jacob Avenue. Based on drainage properties, the eastern edge of the property by the drainage ditches was chosen as the sampling location.

Sampling - Nine samples collected to date. This site was visited during the second wet season sampling event and first dry season sampling event during this sampling year, and a sample was collected on March 22, 2018.

Historical sampling results for this site are presented in Table 14.

Aerial photography of the site is presented on Figure 7.

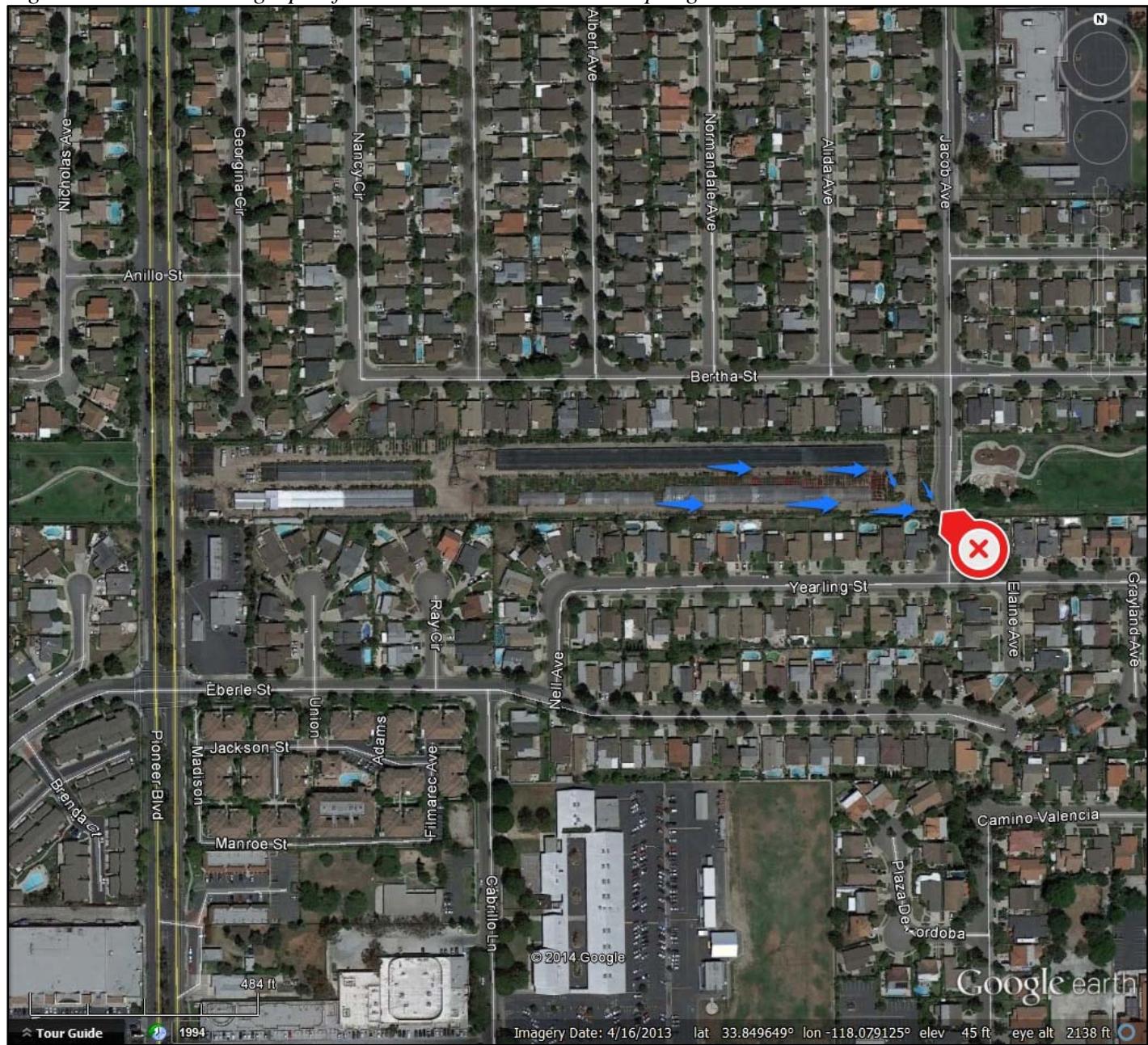
Table 14 - Summary of samples collected, NGA #168

Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #168	NGA-#168-LAILG-1	8/13/07	0.4	81.85	1.977	4.93	131.16	2.28	664	2.13	3.243	122	na	na	na
NGA #168	ILGNGA-#168-2	9/28/07	2.2	172.52	1.582	8.91	340.14	2.15	1,297	3.51	5.379	504	na	na	na
NGA #168	NGA-#168-LAILG-3	11/30/07	0.48	101.43	2.1635	30.81	245.04	2.67	951	3.13	3.548	nd	na	na	na
NGA #168	LAILG-NGA-168-4	1/25/08	0.38	65.9	3.053	14.58	117.44	3.07	592	5.45	2.363	1126.7	na	na	na
NGA #168	LAILG-NGA-168-5	12/15/08	0.25	53.4	1.4434	15.33	130.75	1.568	492	2.24	2.386	236	na	na	na
NGA #168	LAILG-NGA-168-6	3/17/12	0.89	82	1.1	35	470	1.7	1,100	1.1	8.4	1200	500	200	0.110
NGA #168	LAILG-NGA-168-7	5/15/15	0.18	57	0.36	11	120	0.44	400	0.36	0.74	91	134	53.7	0.036
NGA #168	LAILG-NGA-168-8	1/5/16	0.36	41	0.32	15	160	0.45	410	0.32	0.80	140	162	64.9	0.036
NGA #168	LAILG-NGA-168-9	3/22/18	0.14	32	0.450	10	200	0.52	470	0.45	0.69	35	155	62.0	0.027
Site	Sample #	Date	OC Pesticides (ng/L)		OP Pesticides (ng/L)	Pyd Pesticides (ng/L)									
			Total DDT and Derivatives	Total Chlordane			Malathion	Total sum of all detected Pyrethroids							
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	nd	nd	nd	1,379.1								
NGA #168	ILGNGA-#168-2	9/28/07	118	nd	nd	nd	964.0								
NGA #168	NGA-#168-LAILG-3	11/30/07	2.7	2.8	8.9	nd	466.1								
NGA #168	LAILG-NGA-168-4	1/25/08	19.2	nd	nd	nd	187.9								
NGA #168	LAILG-NGA-168-5	12/15/08	11.8	nd	38.9	nd	1,375.9								
NGA #168	LAILG-NGA-168-6	3/17/12	nd	nd	nd	nd	72								
NGA #168	LAILG-NGA-168-7	5/15/15	nd	nd	nd	nd	484.3								
NGA #168	LAILG-NGA-168-8	1/5/16	nd	nd	nd	nd	379								
NGA #168	LAILG-NGA-168-8	1/5/16	nd	nd	nd	nd	97								

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 7 – Aerial Photograph of NGA #168 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

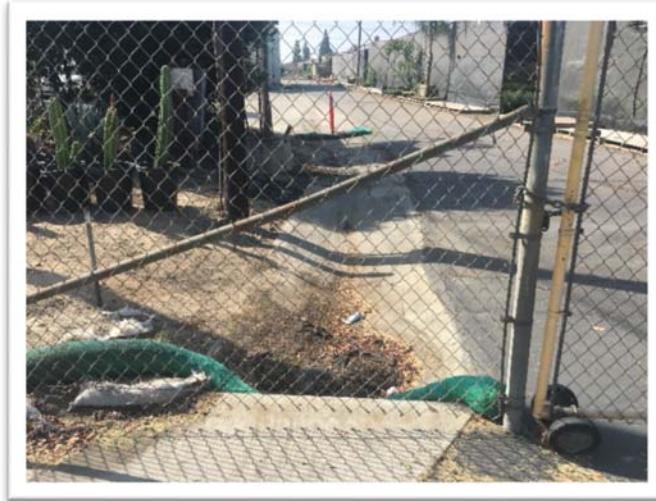
NGA SITE #4

Previous Sampling Group: Group 4
Previous Sampling Frequency - Fixed
Total / Irrigated Acres: 19.2 / 11.5
Sample site GPS location: N 33° 52' 55.5" W 118° 16' 06.1"

March 22, 2018, wet season, sample collected



September 13, 2018, dry season, no sample collected



Site Drainage - The northern half of the site drains northward into two storm drains located on the property boundary along Gardena Boulevard. The southern half of the site drains to the south, where the majority appears to percolate into the soil. Another storm drain is located on the southwest corner of the property. Based on drainage properties, one of the northern storm drains on the edge of the site was chosen as the sampling location.

Sampling – Seven samples collected to date. This site was visited during the second wet season sampling event and first dry season sampling event during this sampling year, and a sample was collected on March 22, 2018.

Historical sampling results for this site are presented in Table 15.

Aerial photography of the site is presented on Figure 8.

Table 2 - Summary of samples collected, NGA #4

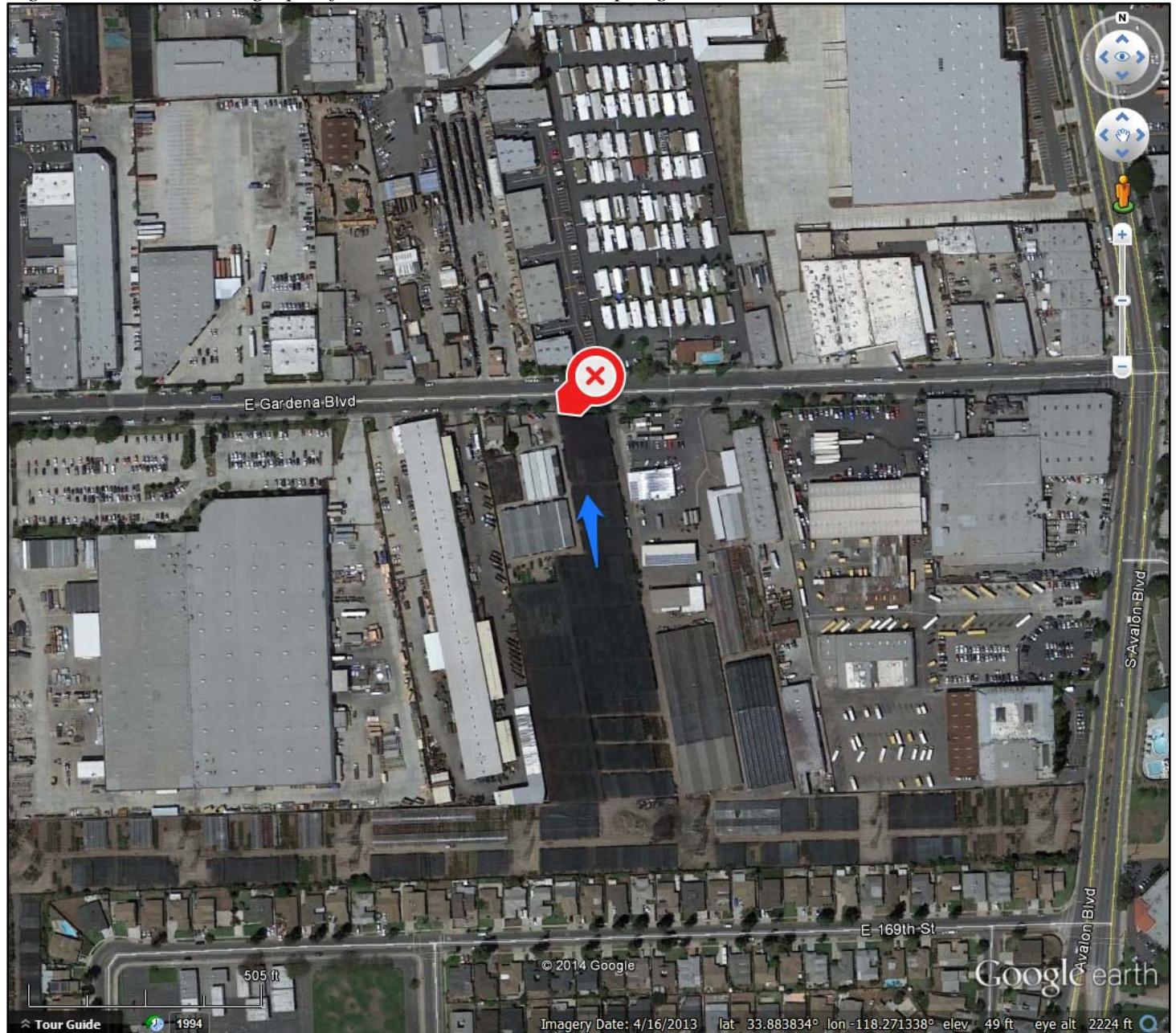
Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #4	NGA #4-LAILG-1	12/7/07	0.48	20.64	1.1355	4.03	20.39	0.8	186	0.77	0.829	58	na	na	na
NGA #4	LAILG-NGA4-2	1/23/08	0.24	1.45	0.1891	0.6	3.87	0.15	145	0.26	1.848	27	na	na	na
NGA #4	LAILG-NGA 4-3	8/13/08	0.68	350.11	11.5262	200.18	219.52	69.7	2,238	13.05	31.713	371	na	na	na
NGA #4	LAILG-NGA 4-4	12/15/08	0.52	8.67	1.0382	2.7	15.23	0.158	238	2.33	2.231	295	na	na	na
NGA #4	LAILG-NGA 4-5	3/21/11	0.69	10	0.31	1.5	8.3	0.52	110	0.310	2.6	810	62	25	0.230
NGA #4	LAILG-NGA 4-6	3/25/12	na	69	1.1	17	52	1.0	320	1.1	1.4	34	100	42	0.051
NGA #4	LAILG-NGA-4-8	1/20/17	0.33	3.3	0.082	0.76	2.4	0.080	46	0.082	0.12	15	7.58	3.04	0.0045
NGA #4	LAILG-NGA-4-9	3/22/18	0.32	2.4	0.25	0.58	2.500	0	42,000	0.25	0.44	82	13.5	5.4200	0.022

Site	Sample #	Date	OC Pesticides (ng/L)			OP Pesticides (ng/L)				Pyd Pesticides (ng/L)
			Dicofol	Total DDT and Derivatives	Total Chlordane	Chlorpyrifos	Diazinon	Dichlorvos	Malathion	Total sum of all detected Pyrethroids
NGA #4	NGA #4-LAILG-1	12/7/07	nd	nd	nd	1,122.6	175.2	11.3	nd	2,107.5
NGA #4	LAILG-NGA4-2	1/23/08	nd	nd	nd	153.8	2,212.1	nd	15,453.2	1,389.4
NGA #4	LAILG-NGA 4-3	8/13/08	485.7	nd	38.8	nd	6,058.9	nd	1,148,630	26,753.7
NGA #4	LAILG-NGA 4-4	12/15/08	nd	nd	99.5	590.9	859	nd	102,357.2	96,588.0
NGA #4	LAILG-NGA 4-5	3/21/11	na	38	39.6	11,000	1,000	nd	7,300	1,625.3
NGA #4	LAILG-NGA 4-6	3/25/12	nd	nd	nd	44,000	nd	nd	2,100	109.7
NGA #4	LAILG-NGA-4-8	1/20/17	nd	nd	nd	11	17	nd	30	nd
NGA #4	LAILG-NGA-4-9	3/22/18	nd	nd	nd	360	62.0	nd	160	nd

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 8 – Aerial Photograph of NGA #4 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

NGA SITE #176

Previous Sampling Group: Group 4
Previous Sampling Frequency - Fixed
Total/Irrigated Acres: 12.0/7.5 Acres
Sample site GPS location: N 33° 51' 24.4" W 118° 22' 51.6"

March 22, 2018, wet season, no sample collected



September 13, 2018, dry season, no sample collected



Site Drainage - The site drains to the center, and they currently have a catch basin in the center to catch site runoff. During heavy rains, runoff from the site is reported to occur, and appears that it would run off to the southeast corner of the site.

Sampling – Three samples collected to date. This site was visited during the second wet season sampling event and first dry season sampling event during this sampling year; no samples were collected.

Historical sampling results for this site are presented in Table 16.

Aerial photography of the site is presented on Figure 9.

Table 3 - Summary of samples collected, NGA #176

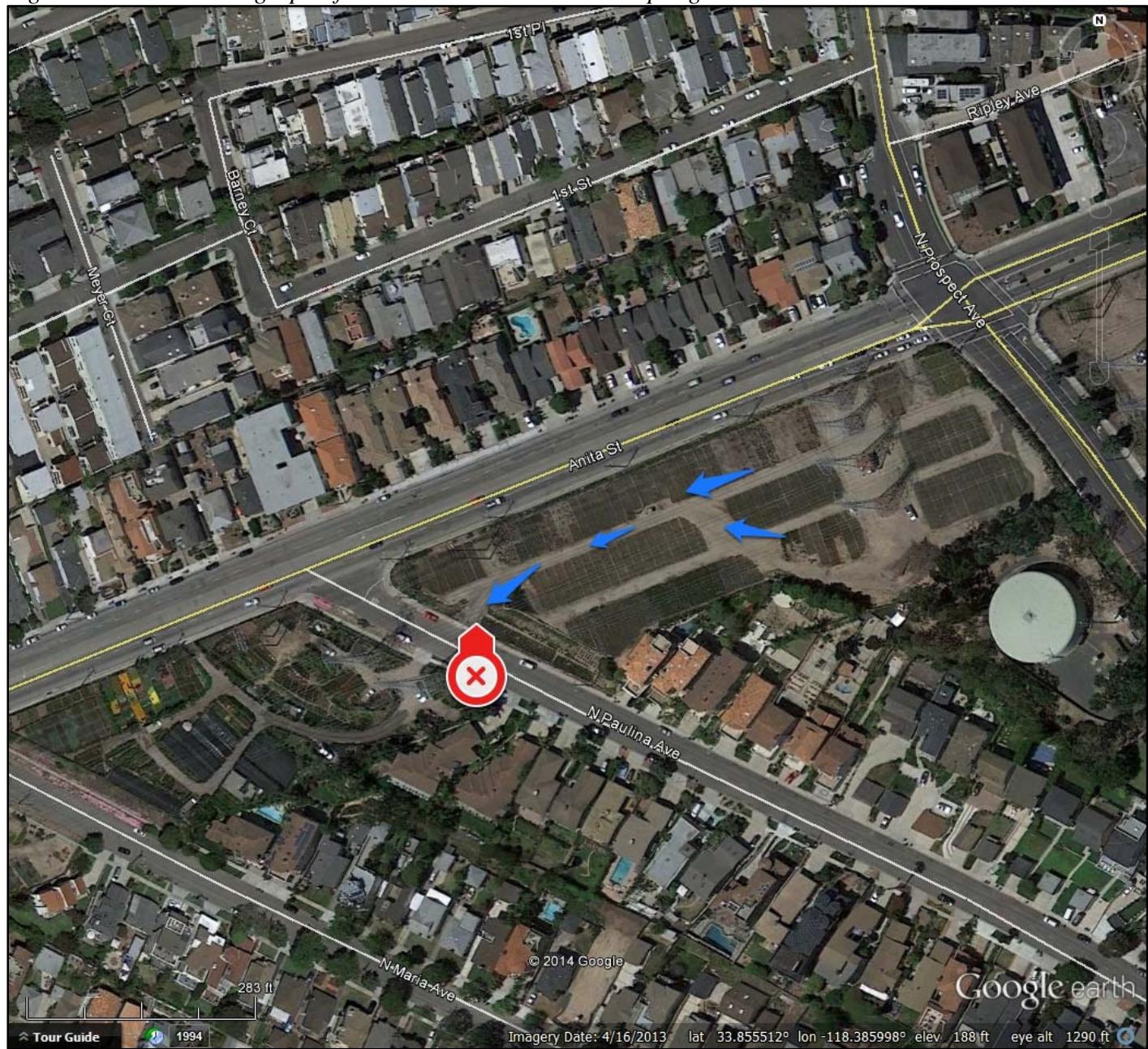
Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #176	NGA-#176-LAILG-1	12/18/07	5.5	56.82	0.7145	3.85	293.12	0.54	680	12.21	3.447	6,168	na	na	na
NGA #176	LAILG-NGA-176-2	3/25/12	0.30	29	0.99	8.7	43	0.99	220	0.99	2.2	550	80	32	0.066
NGA #176	LAILG-NGA-176-3	1/20/17	<0.10	3.9	0.28**	0.70	3.6	0.32	97	0.28**	0.70	360	13.4	5.38	0.029

Site	Sample #	Date	OC Pesticides (ng/L)	OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
			No Detected DDT and Derivatives	No Detected OP Pesticides Detected	Total sum of all detected Pyrethroids
NGA #176	NGA-#176-LAILG-1	12/18/07			873.9
NGA #176	LAILG-NGA-176-2	3/25/12			305
NGA #176	LAILG-NGA-176-3	1/20/17			nd

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 9 – Aerial Photograph of NGA #176 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

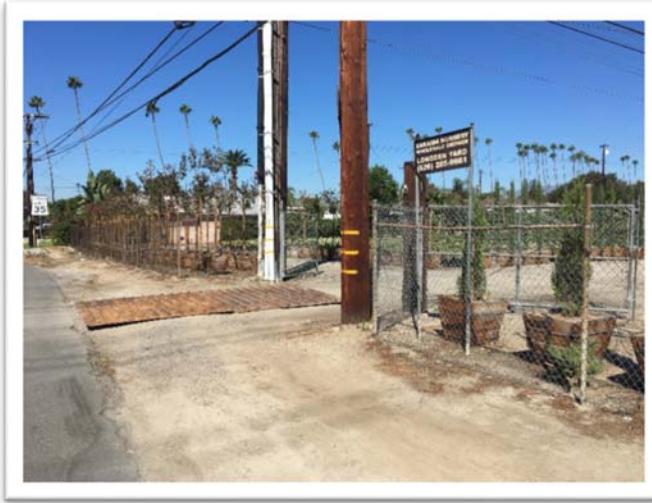
NGA SITE # 158

Previous Sampling Group: Group 1
Previous Sampling Frequency - Rotating
Total / Irrigated Acres: 7.00 / 6.89
Sample site GPS location: N 34° 06' 49.0" W 118° 04' 55.9"

January 9, 2018, wet season, no sample collected



September 18, 2018, dry season, no sample collected



Site Drainage – The topography is relatively flat, and drains as surface flow. Based on drainage properties and site access, the southwestern corner of property to the north of Longden Avenue was chosen as the sampling location.

Sampling – One sample collected to date. This site was visited during the first wet season sampling event and the second dry season sampling event during this sampling year; no samples were collected.

Historical sampling results for this site are presented in Table 17.

Aerial photography of the site is presented on Figure 10.

Table 4 - Summary of samples collected, NGA #158

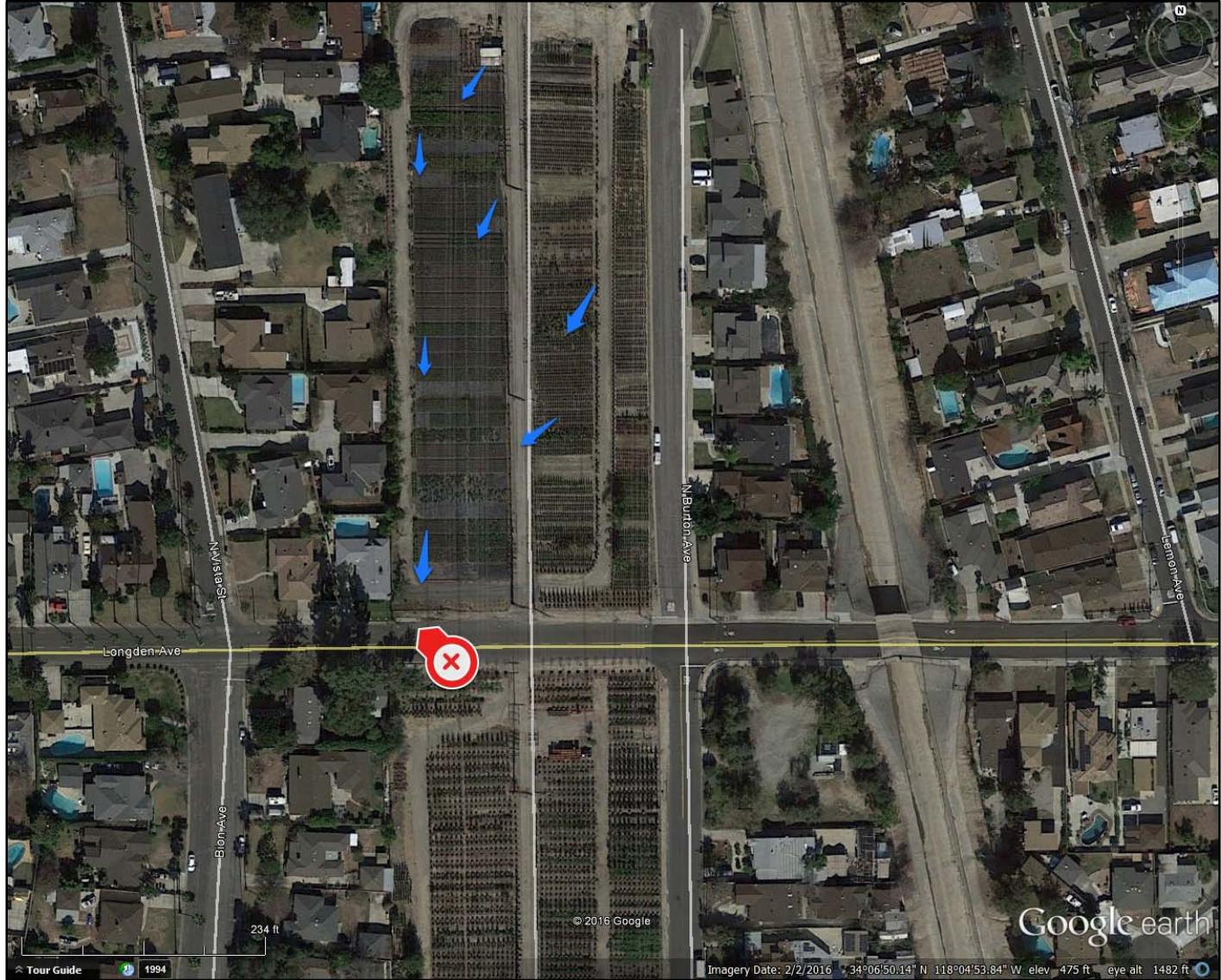
Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #158	LAILG-NGA-158-1	2/17/17	0.18	1.9	0.19	0.55	20	0.29	38	0.19	0.60	110	29.5	11.8	0.039

Site	Sample #	Date	OC Pesticides (ng/L)		OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
			No Detected DDT and Derivatives	No Detected Chlordanes	No OP Pesticides Detected	Total sum of all detected Pyrethroids
NGA #158	LAILG-NGA-158-1	2/17/17				54

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 10 – Aerial Photograph of NGA #158 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

NGA SITE # 202

Previous Sampling Group: Group 2
Previous Sampling Frequency - Rotating
Total / Irrigated Acres: 9.00 / 7.00
Sample site GPS location: N 34° 06' 37.6" W 117° 56' 28.0"

January 9, 2018, wet season, sample collected



September 18, 2018, dry season, no sample collected



Site Drainage – The site lies in a valley, with the surrounding area a couple feet above grade. Natural grade drains from north to south. The estimated discharge will be the southern-most access gate on the property.

Sampling – Two samples collected to date. This site was visited during the first wet season sampling event and the second dry season sampling event during this sampling year, and a sample was collected on January 9, 2018.

Historical sampling results for this site are presented in Table 18.

Aerial photography of the site is presented on Figure 11.

Table 5 - Summary of samples collected, NGA #202

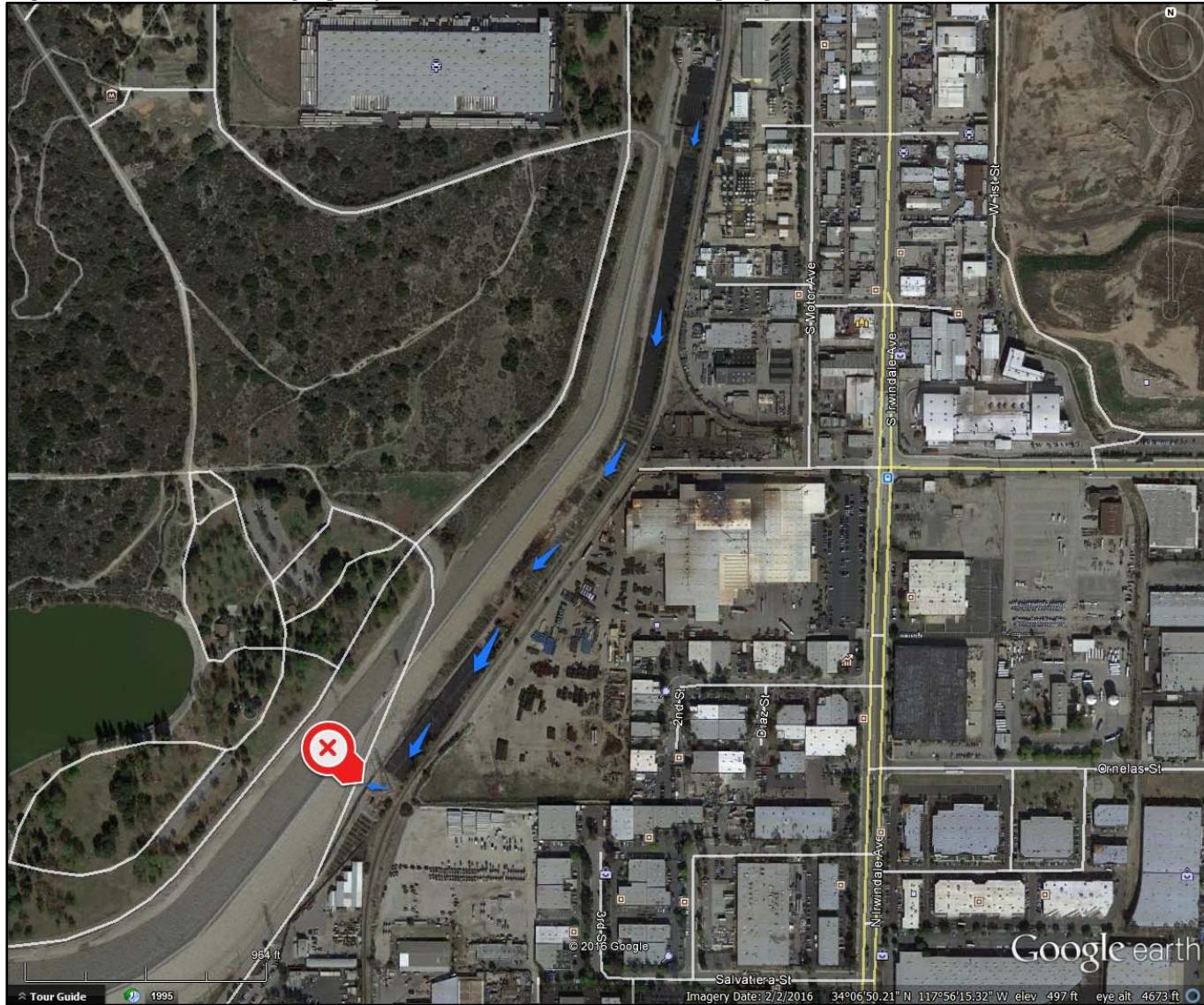
Site	Sample #	Date	General Chemistry (mg/L)												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #202	LAILG-NGA-202-1	2/17/17	0.11	6.5	0.45	1.8	18	0.47*	140	0.46	0.81	130	39.7	15.9	0.038
NGA #202	LAILG-NGA-202-2	1/9/18	0.23	30	1.800	7.2	60	1.8	310	1.8	2.2	61	99.2	39.7	0.037

Site	Sample #	Date	OC Pesticides (ng/L)		OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
			No Detected DDT and Derivatives	No Detected Chlordanes	Malathion	Total sum of all detected Pyrethroids
NGA #202	LAILG-NGA-202-1	2/17/17			nd	96
NGA #202	LAILG-NGA-202-2	1/9/18			73	47

Results above CWIL Limits are presented in **BOLD**.

mg/L	milligrams per liter	Diss	Dissolved
ng/L	nanograms per liter	Ortho	Orthophosphate
OC	Organochlorinated Pesticide	Phos	Phosphorus
OP	Organophosphorus Pesticide	TDS	Total Dissolved Solids
Pyd	Pyrethroid Pesticide	TSS	Total Suspended Solids
na	Constituent not analyzed	Ca	Calcium
nd	Constituent not detected	Cu	Copper

Figure 11 – Aerial Photograph of NGA #202 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

6.0 SUMMARY OF SAMPLING SITE RESULTS

6.1 WATER QUALITY BENCHMARK EXCEEDANCES

A total of 90 samples have been collected since the inception of the program. During this sampling year, a total of eight samples were collected over two sampling events.

For the purpose of analysis, benchmarks are broken into four general groups: general chemistry (including nutrients), pesticides, toxicity, and field monitoring. Water quality benchmarks for each group are presented in Section 4. A summary of WQBs exceeded during this sampling year, and throughout the life of the program, is presented below. Numerical values for each constituent are presented on the tables included in Appendix B, and laboratory analytical results are presented in Appendix C. A discussion of the exceedances follows.

6.1.1 General Chemistry

Based on laboratory analytical results, WQBs were exceeded for seven general chemistry constituents in samples collected at four of the eight sites sampled during this sampling year. Table 19 summarizes general chemistry exceedances for individual constituents reported during this sampling year and throughout the life of the program. A complete summary of analytical results for general chemistry constituents is included in Appendix B.

Total Dissolved Solids

Laboratory results reported TDS exceedances in three of the eight samples collected during this sampling period, and 31 of the 90 total samples (34.4 %) collected throughout the life of the program have reported exceedances of TDS.

Chloride

Laboratory results reported Chloride exceedances in one of the eight samples collected during this sampling period, and eight of the 90 total samples (8.9 %) collected throughout the life of the program have reported exceedances of Chloride.

Sulfate

Laboratory results reported Sulfate exceedances in one of the eight samples collected during this sampling period, and 12 of the 90 total samples (13.3 %) collected throughout the life of the program have reported exceedances of Sulfate.

Nutrients (Nitrate/Ammonia/Phosphorus)

Laboratory results reported Nitrogen as Nitrate exceedances in two of the eight samples during this sampling period, and 45 of the 90 total samples (50.0 %) collected throughout the life of the program. Laboratory results did not report Nitrogen as Ammonia exceedances in any samples collected during this sampling period. Four of the 90 total samples (4.4 %) collected throughout the life of the program have reported exceedances of Ammonia. WQBs for Phosphate have not been established.

Table 19 - Summary of Water Quality Exceedances, General Chemistry

Constituent	CWIL Order # R4-2005-0080												Total	% of samples		
	YEAR 1				YEAR 2				YEAR 3		YEAR 4					
	Dry Season		Wet Season		Dry Season		Wet Season		Dry Season	Wet Season	Dry Season	Wet Season				
	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #1				
Ammonia	1	1	0	1	0	0	1	0	ns	ns	ns	ns	4	7.7%		
TDS	4	3	5	2	1	0	2	2	ns	ns	ns	ns	19	36.5%		
Sulfate	0	0	1	1	0	0	2	2	ns	ns	ns	ns	6	11.5%		
Chloride	1	0	2	1	0	0	0	1	ns	ns	ns	ns	5	9.6%		
Nitrogen	3	3	7	2	2	1	4	8	ns	ns	ns	ns	30	57.7%		
Total Number of Exceedances	9	7	15	7	3	1	9	13	ns	ns	ns	ns	64			
Average # of Exceedances per sample	1.80	2.33	1.07	0.88	1.50	1.00	1.13	1.18	ns	ns	ns	ns	1.23			
Number of Samples Collected	5	3	14	8	2	1	8	11	ns	ns	ns	ns	52			

ns Program suspended, no sample collected

Constituents	CWIL Order # R4-2010-0186														Total	% of samples		
	Interim Sampling	YEAR 1				YEAR 2				YEAR 3			YEAR 4					
		Dry Season		Wet Season		Dry Season		Wet Season		Dry Season	Wet Season	Wet Season	Dry Season	Wet Season				
		Event #1	Event #2	Event #1	Event #1	Event #2												
Ammonia	March 2011	0			0	0				0			0	0	0	0.0%		
TDS		3			1	1				2			1	0	0	36.4%		
Sulfate		0			1	1				1			1	0	0	18.2%		
Chloride		0			0	0				1			0	0	0	4.5%		
Nitrogen		2			2	1				3			1	1	1	50.0%		
Total Number of Exceedances		5	0	0	4	3	0	0	0	0	0	7	0	0	1	24		
Average # of Exceedances per sample		1.25	--	--	1.00	0.75	--	--	--	1.40	--	--	1.50	1.00	--	0.50	1.09	
Number of Samples Collected		4	0	0	4	4	0	0	0	0	0	5	0	0	2	22		

Table 19, cont. - Summary of Water Quality Exceedances, General Chemistry

Constituents	CWIL Order # R4-2016-0143										Total	% of samples		
	YEAR 1, Interim				YEAR 2, Interim				YEAR 3, Interim					
	Dry Season		Wet Season		Dry Season		Wet Season		Dry Season					
	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2				
Ammonia			0	0			0	0			0	0.0%		
TDS			0	1			2	1			4	25.0%		
Sulfate			0	1			1	0			2	12.5%		
Chloride			0	1			1	0			2	12.5%		
Nitrogen			1	1			0	2			4	25.0%		
Total Number of Exceedances	0	0	1	4	0	0	4	3	0	0	12			
Average # of Exceedances per sample	--	--	0.33	0.80	--	--	1.00	0.75	--	--	0.75			
Number of Samples Collected	0	0	3	5	0	0	4	4	0	0	16			

Constituents	Totals, all Orders		Total	% of samples
	Dry Season	Wet Season		
Ammonia	2	2	4	4.4%
TDS	8	23	31	34.4%
Sulfate	0	12	12	13.3%
Chloride	1	7	8	8.9%
Nitrogen	9	36	45	50.0%
Total Number of Exceedances	20.00	80.00	100	
Average # of Exceedances per sample	1.82	1.01	1.11	
Number of Samples Collected	11	79	90	

6.1.2 Pesticides

Based on laboratory analytical results, WQBs were exceeded for three pesticide constituents in samples collected at three of the eight sites during this sampling year. Table 20 summarizes pesticide exceedances for individual constituents reported throughout the life of the program. A complete summary of analytical results for the analyzed pesticide constituents is included in Appendix B.

OC Pesticides

Laboratory results did not report OC Pesticide exceedances in the eight samples collected this sampling year. There have been 58 individual constituent exceedances in the 90 total samples collected throughout the life of the program.

Chlordane and 4,4' DDE have been the most prevalent OC pesticides detected, accounting for 39 of the 58 total exceedances. Exceedances were more prevalent during the original waiver period (CWIL Order #R4-2005-0080).

OP Pesticides

Laboratory results reported OP Pesticide exceedances in the two of the eight samples collected this sampling year. There have been 28 individual constituent exceedances in the 90 total samples collected throughout the life of the program.

OP pesticides detected over WQBs throughout all waiver periods have been Chlorpyrifos, Diazinon, and Malathion.

Pyrethroids

Laboratory results reported Pyrethroid Pesticide exceedances in the one of the eight samples collected this sampling year. There have been 97 individual constituent exceedances in the 90 total samples collected throughout the life of the program.

Table 20 - Summary of Water Quality Exceedances, Pesticides

Constituent	CWIL Order # R4-2005-0080												Total	% of samples		
	YEAR 1				YEAR 2				YEAR 3		YEAR 4					
	Dry Season		Wet Season		Dry Season		Wet Season		Dry Season	Wet Season	Dry Season	Wet Season				
	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #1	Event #1	Event #1				
Waiver Limitations																
OC Pesticides																
Chlordane	1	0	6	1	2	1	4	3	ns	ns	ns	ns	18	34.62%		
4,4'DDT	2	2	2	1	0	0	0	0	ns	ns	ns	ns	7	13.46%		
4,4'DDD	2	2	2	1	0	0	0	2	ns	ns	ns	ns	9	17.31%		
4,4'DDE	2	1	5	2	0	1	2	4	ns	ns	ns	ns	17	32.69%		
Dieldrin	0	0	0	0	0	0	0	0	ns	ns	ns	ns	0	0.00%		
Toxaphene	0	0	0	0	0	0	0	1	ns	ns	ns	ns	1	1.92%		
Waiver, OC Pesticide # of Exceedances	7	5	15	5	2	2	6	10	0	0	0	0	52			
OP Pesticides																
Chlorpyrifos	0	0	2	1	0	0	1	3	ns	ns	ns	ns	7	13.46%		
Diazinon	0	0	2	1	1	0	0	1	ns	ns	ns	ns	5	9.62%		
Waiver, OP Pesticide # of Exceedances	0	0	4	2	1	0	1	4	0	0	0	0	12			
Aquatic Life Guidelines																
OP Pesticides																
Malathion	0	0	1	1	1	0	0	2	ns	ns	ns	ns	5	9.62%		
ALB, OP Pesticide # of Exceedances	0	0	1	1	1	0	0	2	0	0	0	0	5			
Pyrethroid Pesticides																
Bifenthrin	1	2	4	0	0	0	2	3	ns	ns	ns	ns	12	23.08%		
Cyfluthrin	2	1	4	2	0	0	5	4	ns	ns	ns	ns	18	34.62%		
Fenpropathrin (Danitol)	1	0	3	2	1	0	2	2	ns	ns	ns	ns	11	21.15%		
Fluvalinate	0	1	0	0	1	0	2	3	ns	ns	ns	ns	7	13.46%		
Deltamethrin	0	0	2	2	1	0	0	2	ns	ns	ns	ns	7	13.46%		
Lambda-cyhalothrin	1	0	1	1	1	0	6	2	ns	ns	ns	ns	12	23.08%		
Permethrin	1	1	4	0	1	0	3	4	ns	ns	ns	ns	14	26.92%		
ALB, Pyrethroid Pesticide # of Exceedances	6	5	18	7	5	0	20	20	0	0	0	0	81			
Total Number of Exceedances	13	10	38	15	9	2	27	36	ns	ns	ns	ns	150			
Average # of Exceedances per sample	2.60	3.33	2.71	1.88	4.50	2.00	3.38	3.27	ns	ns	ns	ns	2.88			
Number of Samples Collected	5	3	14	8	2	1	8	11	ns	ns	ns	ns	52			

ns Program suspended, no sample collected

Table 20 cont.- Summary of Water Quality Exceedances, Pesticides

Constituents	Interim Sampling	CWIL Order # R4-2010-0186																		Total	% of samples			
		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5						
		Dry Season		Wet Season		Dry Season		Wet Season		Dry Season		Wet Season		Dry Season		Wet Season		Dry Season						
	March 2011	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2					
Waiver Limitations																								
OC Pesticides																								
Chlordane	1			0	0							0			0	0			0	1	4.55%			
4,4'DDT	1			0	0							0			0	0			0	1	4.55%			
4,4'DDD	0			0	0							0			0	0			0	0	0.00%			
4,4'DDE	1			1	1							0			0	0			0	3	13.64%			
Dieldrin	1			0	0							0			0	0			0	1	4.55%			
Toxaphene	0			0	0							0			0	0			0	0	0.00%			
Waiver, OC Pesticide # of Exceedances	4	0	0	1	1	0	0	6																
OP Pesticides																								
Chlorpyrifos	3			0	1							1			0	0			0	5	22.73%			
Diazinon	1			0	0							0			0	0			0	1	4.55%			
Waiver, OP Pesticide # of Exceedances	4	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6				
Aquatic Life Guidelines																								
OP Pesticides																								
Malathion	1			0	1							0			0	0			0	2	9.09%			
ALB, OP Pesticide # of Exceedances	1	0	0	0	1	0	0	2																
Pyrethroid Pesticides																								
Bifenthrin	0			0	0							1			1	0			0	2	9.09%			
Cyfluthrin	0			0	0							1			0	0			0	1	4.55%			
Cypermethrin	0			0	0							0			0	0			0	0	0.00%			
Fenpropathrin (Danitol)												0			1	0			0	1	4.55%			
Deltamethrin	0			1	0							0			0	0			0	1	4.55%			
Lambda-cyhalothrin	0			0	0							0			0	0			0	0	0.00%			
Permethrin	2			0	1							1			1	0			0	5	22.73%			
ALB, Pyrethroid Pesticide # of Exceedances	2	0	0	1	1	0	0	0	0	0	3	0	0	3	0	0	0	0	0	10				
Total # of Exceedances	11	0	0	2	4	0	0	0	0	0	4	0	0	3	0	0	0	0	0	24				
Average # of Exceedances per sample	2.75	--	--	0.50	1.00	--	--	--	--	--	0.80	--	--	1.50	0.00	--	--	0.00	1.09					
Number of Samples Collected	4	0	0	4	4	0	0	0	0	0	5	0	0	2	1	0	0	2	22					

Table 20 cont.- Summary of Water Quality Exceedances, Pesticides

Constituents	CWIL Order # R4-2016-0143										Total	% of samples			
	YEAR 1, Interim				YEAR 2, Interim				YEAR 3, Interim						
	Dry Season		Wet Season		Dry Season		Wet Season		Dry Season						
	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2					
Waiver Limitations															
OC Pesticides															
Chlordane			0	0			0	0			0	0.00%			
4,4' DDT			0	0			0	0			0	0.00%			
4,4' DDD			0	0			0	0			0	0.00%			
4,4' DDE			0	0			0	0			0	0.00%			
Dieldrin			0	0			0	0			0	0.00%			
Toxaphene			0	0			0	0			0	0.00%			
Waiver, OC Pesticide # of Exceedances	0	0	0	0	0	0	0	0	0	0	0				
OP Pesticides															
Chlorpyrifos			0	0			0	1			1	6.25%			
Diazinon			0	0			0	0			0	0.00%			
Waiver, OP Pesticide # of Exceedances	0	0	0	0	0	0	0	1	0	0	1				
Aquatic Life Guidelines															
OP Pesticides															
Malathion			0	0			1	1			2	12.50%			
ALB, OP Pesticide # of Exceedances	0	0	0	0	0	0	1	0	0	0	2				
Pyrethroid Pesticides															
Bifenthrin			0	2			0	0			2	12.50%			
Cyfluthrin			0	1			0	0			1	6.25%			
Cypermethrin			0	0			0	0			0	0.00%			
Fenpropathrin (Danitol)			0	1			0	0			1	6.25%			
Deltamethrin			0	0			0	0			0	0.00%			
Lambda-cyhalothrin			0	0			0	0			0	0.00%			
Permethrin			0	1			1	0			2	12.50%			
ALB, Pyrethroid Pesticide # of Exceedances	0	0	0	5	0	0	1	0	0	0	6				
Total # of Exceedances	0	0	0	5	0	0	2	2	0	0	9				
Average # of Exceedances per sample			0.00	1.00			0.50	0.50				0.56			
Number of Samples Collected	0	0	3	5	0	0	4	4	0	0	16				

ni Not included in laboratory analytical suite during this Waiver period

Table 20 cont.- Summary of Water Quality Exceedances, Pesticides

Constituents	Totals, all Orders		Total	% of samples		
	Dry Season	Wet Season				
Waiver Limitations						
OC Pesticides						
Chlordane	4	15	19	21.11%		
4,4' DDT	4	4	8	8.89%		
4,4' DDD	4	5	9	10.00%		
4,4' DDE	4	16	20	22.22%		
Dieldrin	0	1	1	1.11%		
Toxaphene	0	1	1	1.11%		
Waiver, OC Pesticide # of Exceedances	16	42	58			
OP Pesticides						
Chlorpyrifos	0	13	13	14.44%		
Diazinon	1	5	6	6.67%		
Waiver, OP Pesticide # of Exceedances	1	18	19			
Aquatic Life Guidelines						
OP Pesticides						
Malathion	1	8	9	10.00%		
ALB, OP Pesticide # of Exceedances	1	8	9			
Pyrethroid Pesticides						
Bifenthrin	3	13	16	17.78%		
Cyfluthrin	3	17	20	22.22%		
Cypermethrin	2	9	11	12.22%		
Fenpropathrin (Danitol)	2	7	9	10.00%		
Deltamethrin	1	7	8	8.89%		
Lambda-cyhalothrin	2	10	12	13.33%		
Permethrin	3	18	21	23.33%		
ALB, Pyrethroid Pesticide # of Exceedances	16	81	97			
Total # of Exceedances	34	149	183			
Average # of Exceedances per sample	3.09	1.89	2.03			
Number of Samples Collected	11	79	90			

ni Not included in laboratory analytical suite during this Waiver period

6.1.3 Toxicity

Based on laboratory analytical results, toxicity was not significant enough to initiate a TIE in any of the eight samples collected during this sampling year. A total of 16 TIEs have been conducted throughout the life of the program. Seven of the TIEs did not show a significant observed toxicity effect in follow up testing.

Historical TIE results indicated a variety of reasons for toxicity, including non-polar organic compounds, particulate-bound toxicants, volatile compounds, organophosphates, particulate bound toxicants, metals, and a combination of the previously listed toxicants. A historical summary of analytical results for toxicity testing is included for each site in Appendix B.

6.1.4 Field Monitoring Results

Field Monitoring Water Quality Benchmarks are based on the surface water and groundwater basin objectives currently contained in the Basin Plan or other applicable water quality standards established for the Los Angeles Region. Field monitoring readings have not exceeded Basin Plan objectives at any sites sampled during the entire program. A historical summary of results for field measurements is included for each site in Appendix B. Hard copies of field data sheets and field reports are kept on file at PacRL, and are available upon request.

6.2 QUALITY ASSURANCE AND QUALITY CONTROL

QA/QC of data collected this sampling year fell within acceptable control limits established by the analyzing laboratories, and are included in the tables in Appendix B and laboratory analytical documentation included in Appendix C. All field monitoring equipment was calibrated prior to each monitoring event, and verified after calibration with mid-range standards. Calibration logs are kept on-file at PacRL.

Field duplicates and laboratory duplicates are used to check the precision of samples. Field duplicates were not collected this year as the one per 20 samples threshold had yet to be met. Lab duplicates, blank spike duplicates, laboratory control spike duplicates, and matrix spike duplicates were all accepted by the laboratory and did not cause any data to be estimated, as discussed in the laboratory analytical report.

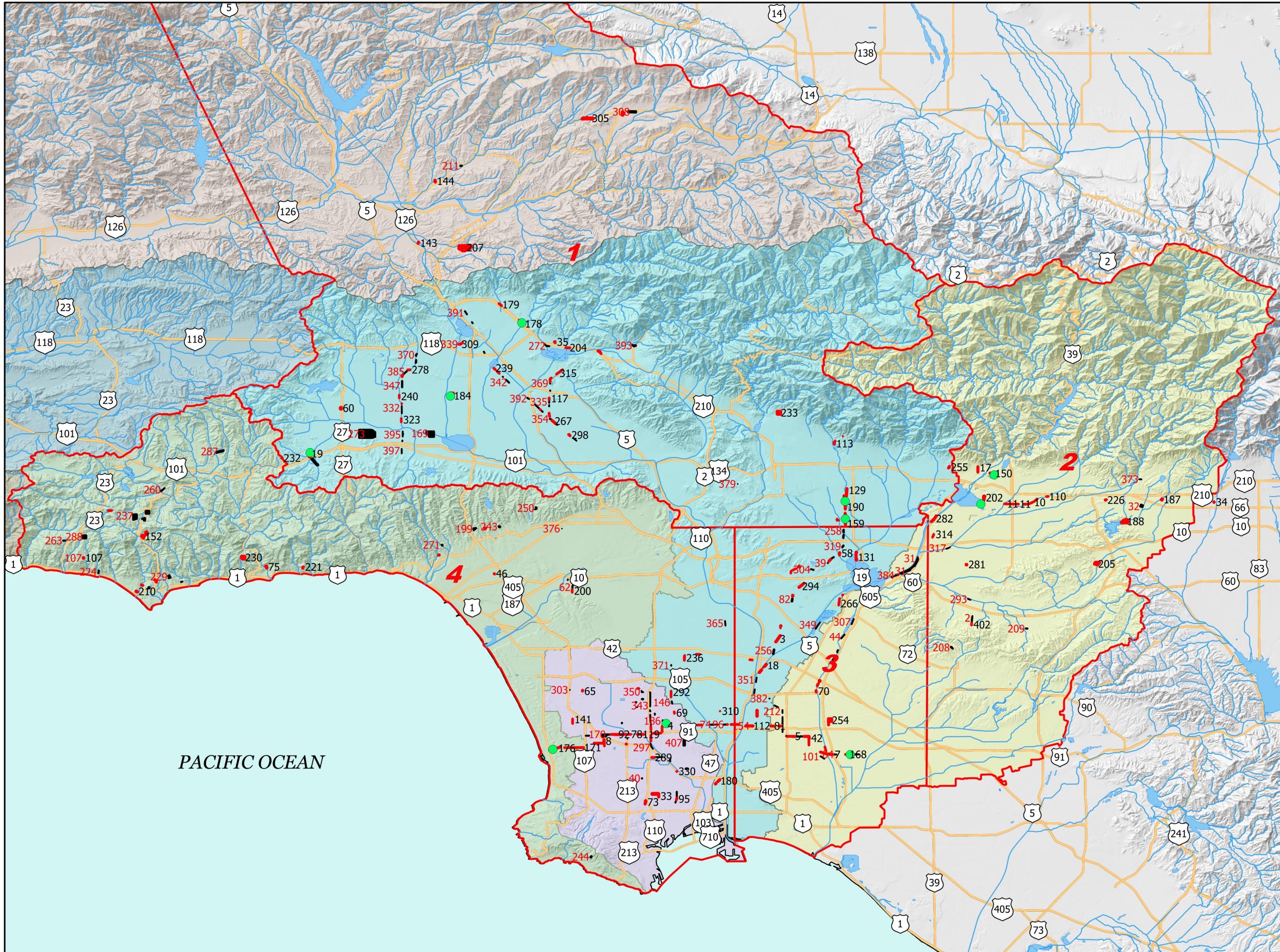
Percent recoveries for bank spike samples, laboratory control samples, and matrix spike samples are used to check the accuracy of samples. Some of these values fell outside the QAQC limits set in the QAPP, however, data was considered valid due to varying reasons, as discussed in the laboratory analytical report included in Appendix C.

7.0 CURRENT EVENTS/WQMP STATUS

The newest version of the WQMP will be submitted on February 1, 2019. LAILG will continue to operate under the basic parameters of the MRP and WQMP developed for Order R4-2010-0186 for the wet season of the 2018-19 sampling year. Once the WQMP has been fully reviewed and the LARWQCB has issued comment letters, LAILG would like to set a meeting with the LARWQCB to discuss future monitoring plans for the program. Ultimately LAILG would like to develop a new MRP that incorporates the groupings and findings of the most recent WQMP.

FIGURE 1

**Los Angeles County Irrigated Lands Group
Los Angeles Regional Watersheds**



Legend

- Enrolled Grower and Number
- Non-Compliant Grower and Number
- Sampling Region and Number
- Sampling Locations
- CA State Roads and Number
- Streams

Watersheds

- Ventura River
- Santa Monica Bay
- SantaClara River
- San Gabriel River
- Misc. Ventura Coastal Stream
- Los Angeles River
- Dominguez Channel LA LB Harbor
- Callegus Creek



0 5 10 M

Scale: 1 Inch = 5 Miles

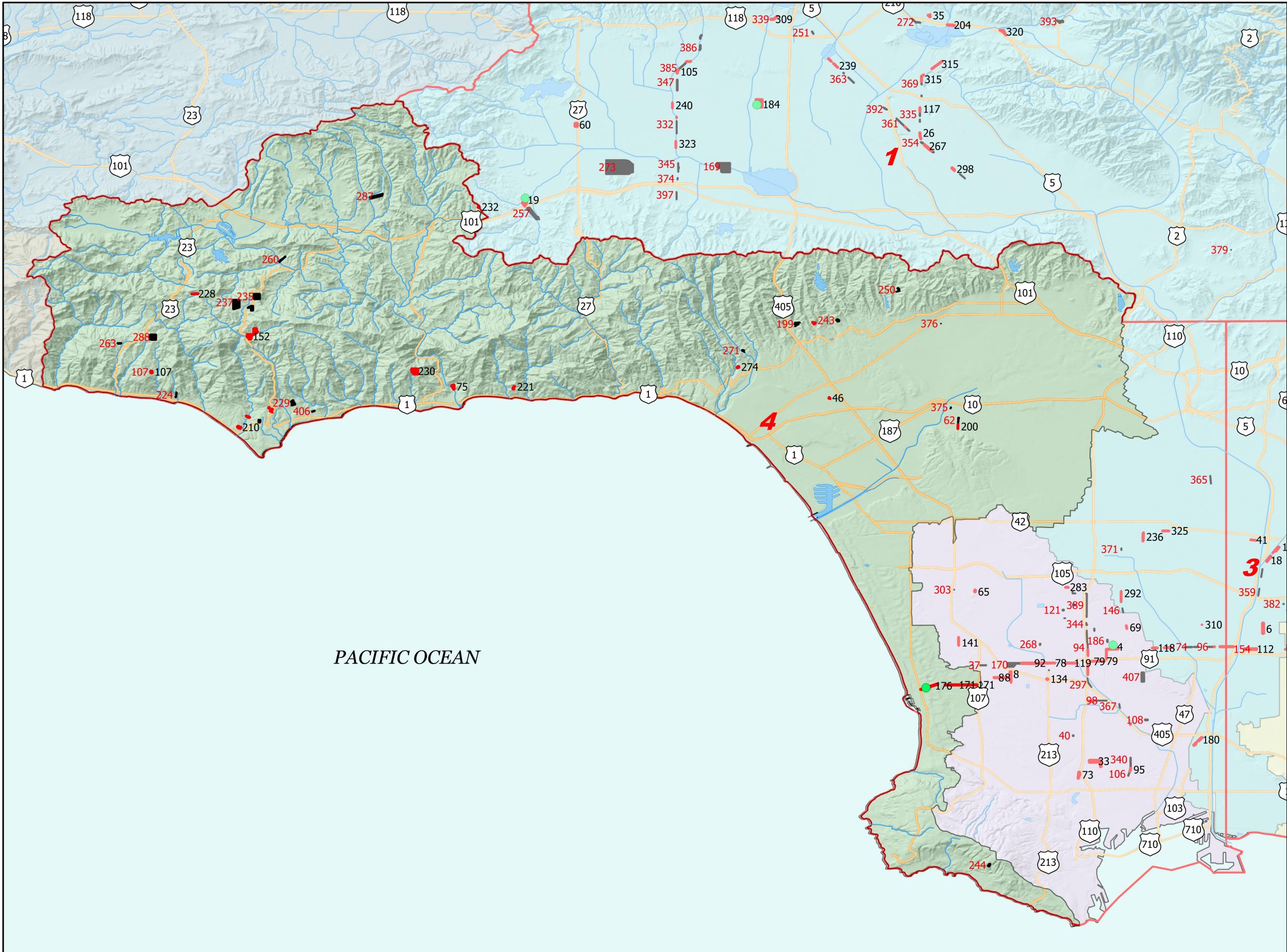
Prepared by:



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FIGURE 1.1

**Los Angeles County Irrigated Lands Group
Santa Monica Bay WMA**



0 4 8 M

Scale: 1 Inch = 4 Miles

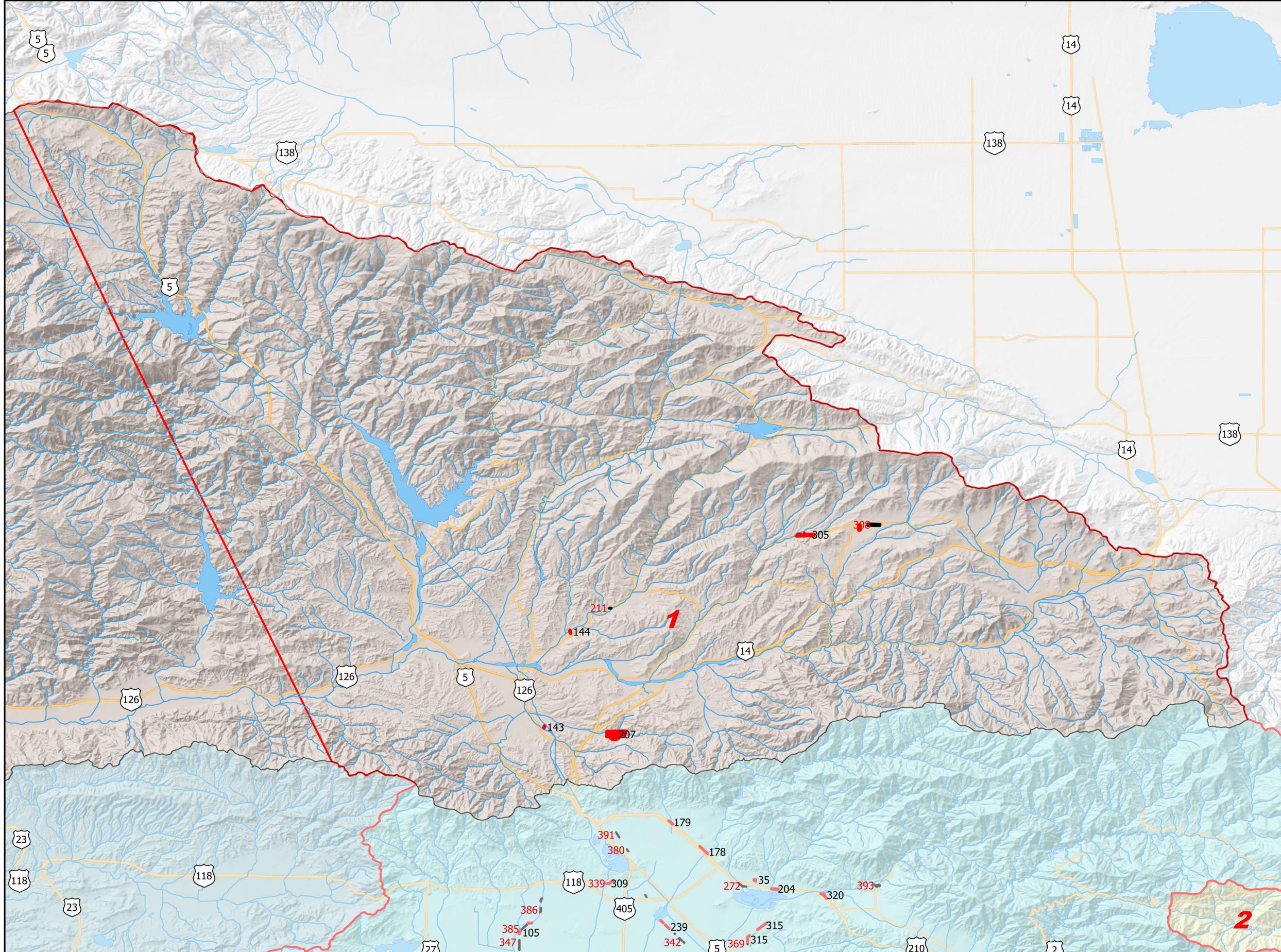
Prepared by:



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FIGURE 1.2

Los Angeles County Irrigated Lands Group Santa Clara River Watershed



Legend

- Enrolled Grower and Number
 - Non-Compliant Grower and Number
 - Sampling Region and Number
 - CA State Roads and Number
 - Streams

Watersheds

- Ventura River
 - Santa Monica Bay
 - SantaClara River
 - San Gabriel River
 - Misc. Ventura Coastal Stream
 - Los Angeles River
 - Dominguez Channel LA LB Harbor
 - Callegus Creek



Scale: 1 Inch = 4 Miles

Prepared by:

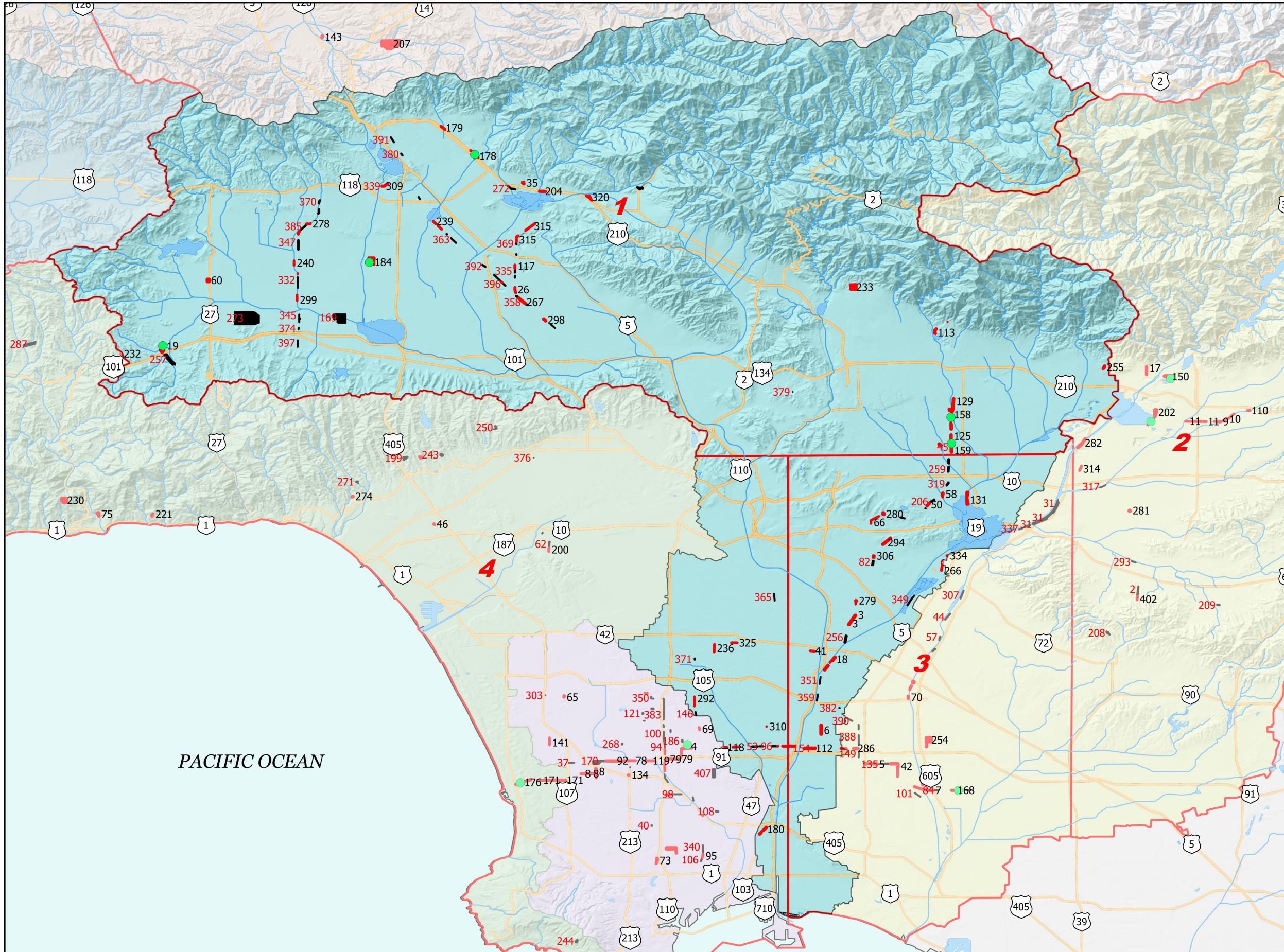


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FIGURE 1.3

Los Angeles County Irrigated Lands Group

Los Angeles River Watershed



Legend

- Enrolled Grower and Number
 - Non-Compliant Grower and Number
 - Sampling Region and Number
 - Sampling Locations
 - CA State Roads and Number
 - Streams

Watersheds

- Ventura River
 - Santa Monica Bay
 - SantaClara River
 - San Gabriel River
 - Misc. Ventura Coastal Stream
 - Los Angeles River
 - Dominguez Channel LA LB Harbor
 - Callegus Creek



A horizontal scale bar with numerical markings at 0, 4, and 8 M. The bar consists of a thick black segment followed by a thinner white segment.

Scale: 1 Inch = 4 Miles

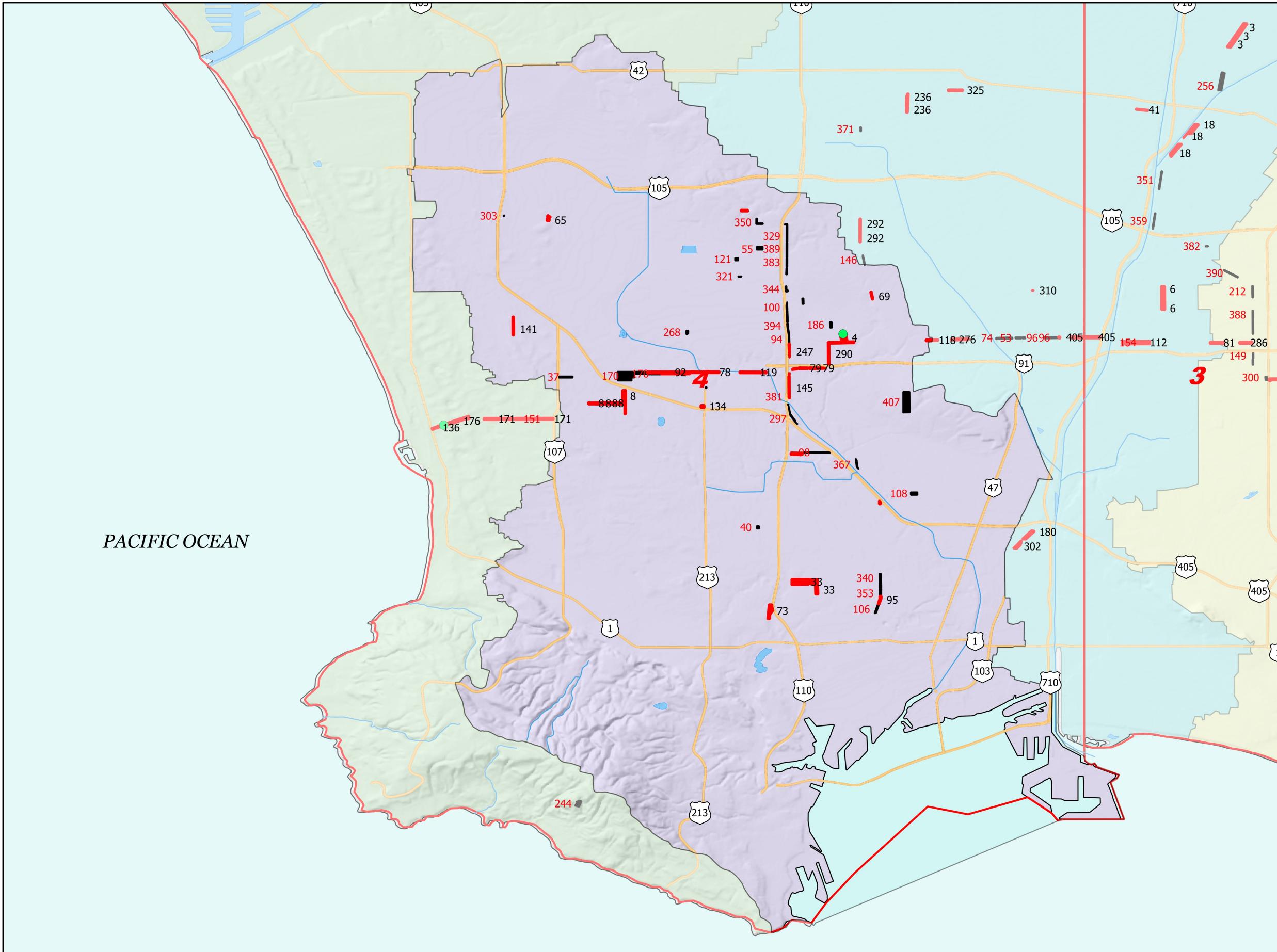
Prepared by:



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FIGURE 1.4

**Los Angeles County Irrigated Lands Group
Dominguez Channel LA/Long Beach Harbors WMA**



Legend

- Enrolled Grower and Number
- Non-Compliant Grower and Number
- Sampling Region and Number
- Sampling Locations
- CA State Roads and Number
- Streams

Watersheds

- Ventura River
- Santa Monica Bay
- SantaClara River
- San Gabriel River
- Misc. Ventura Coastal Stream
- Los Angeles River
- Dominguez Channel LA LB Harbor
- Callegus Creek



0 2 M

Scale: 1 Inch = 2 Miles

Prepared by:

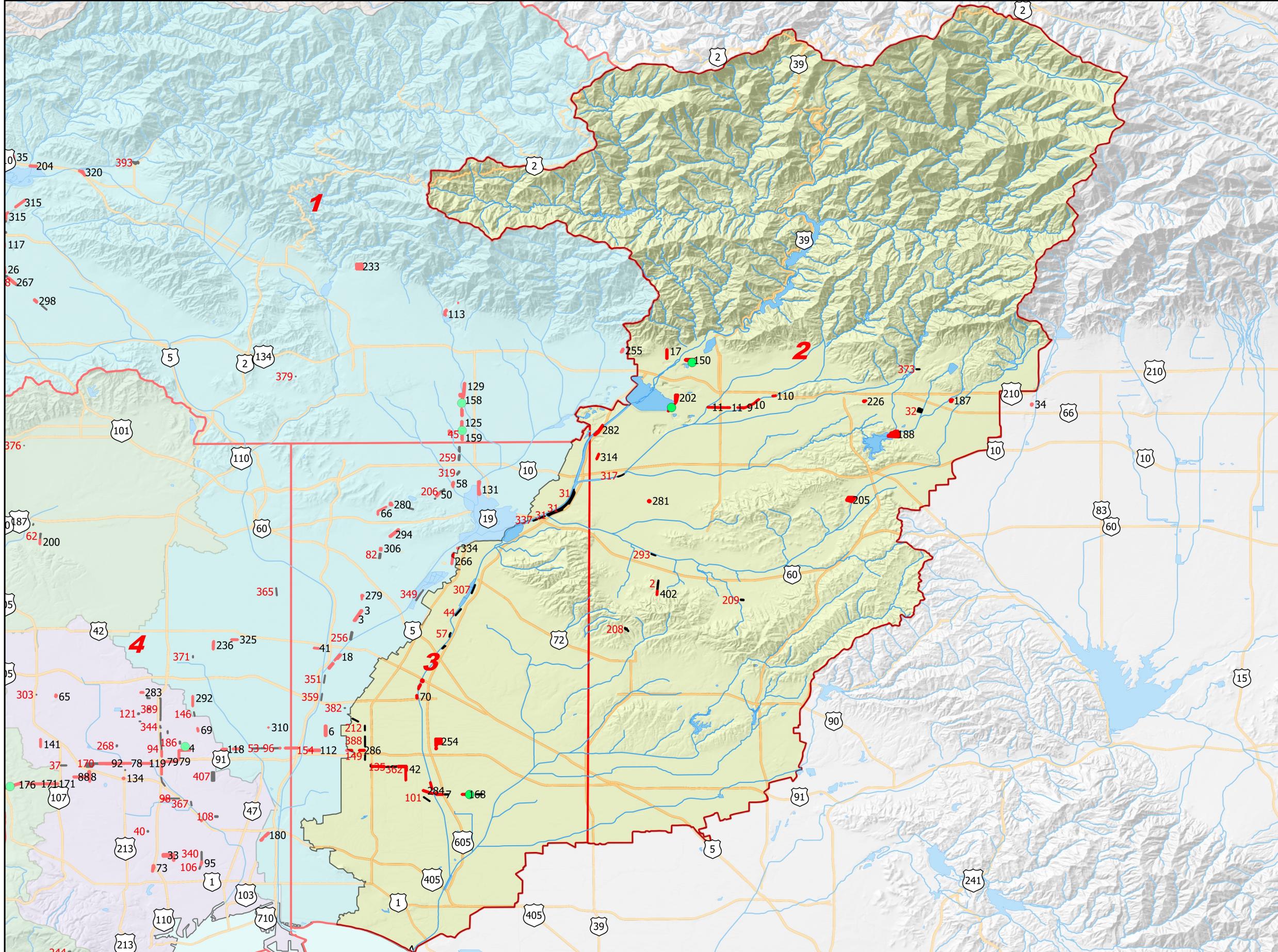


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FIGURE 1.5

Los Angeles County Irrigated Lands Group

San Gabriel Watershed



Legend

- Enrolled Grower and Number
 - Non-Compliant Grower and Number
 - Sampling Region and Number
 - Sampling Location
 - CA State Roads and Number
 - Streams

Watersheds

- Ventura River
 - Santa Monica Bay
 - SantaClara River
 - San Gabriel River
 - Misc. Ventura Coastal Stream
 - Los Angeles River
 - Dominguez Channel LA LB Harbor
 - Callegus Creek



Scale: 1 Inch = 4 Miles

Prepared by:



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APPENDIX A

UPDATED LIST OF LOS ANGELES COUNTY IRRIGATED LANDS GROUP, AS OF JANUARY 31, 2019

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL				MAILING				CROP TYPE	Waters hed	ACREAGE	
			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED
3	ABC Nursery, Inc.	Eric Yonemura	6329001800 6329001801 6330019801 6330019800	6800 Darwell Avenue	Bell Gardens	SCE	424 East Gardena Blvd.	Gardena	CA	90248	GO	LA	22.21	10.20
4	ABC Nursery, Inc.	Eric Yonemura	6126011028 6126011029 6126011035 6126011036 6126011800	424 E. Gardena Boulevard	Gardena	SCE	424 East Gardena Blvd.	Gardena	CA	90248	GO	D	19.19	11.51
5	ABC Nursery, Inc.	Eric Yonemura	7168034801 7168034281 7168034285 7168034270 7168034289 7168034276 7168034278 7168034272 7168034280 7168034273 7168034274	6221 Clark Avenue	Lakewood	DWP	424 East Gardena Blvd.	Gardena	CA	90248	GO	SG	1.66	1.66
6	ABC Nursery, Inc.	Eric Yonemura	6240008800 6240008801 6240008802	7132 Somerset Boulevard	Paramount	SCE	424 East Gardena Blvd.	Gardena	CA	90248	GO	LA	9.52	4.87
7	ABC Nursery, Inc.	Eric Yonemura	7049021800 7049021801 7049021802 7049021803 7049021802 7049021800	20200 Studebaker	Cerritos	SCE	424 East Gardena Blvd.	Gardena	CA	90248	GO	LA	13.84	8.30
8	ABC Nursery, Inc.	Eric Yonemura	4089016802, 4089016800, 4089011801, 4089011800, 4089010800, 4089009800 4089010800 4089011800 4089011801 4089017800 4089016802 4089016800	18601 Yukon Avenue	Torrance	SCE	424 East Gardena Blvd.	Gardena	CA	90248	GO	D	21.97	10.20
9	Acosta Growers Inc.	Heriberto Acosta/Eddie Acosta	8622022270 8622012271 8622013270 8622022006	5359 Citrus Ave	Azusa	DWP	18012 E. Alford St.	Azusa	CA	91702	GO	SG	3.00	2.80
10	Acosta Growers Inc.	Heriberto Acosta/Eddie Acosta	8630008274 8629002270	1050 E Gladstone St	Azusa	DWP	18012 E. Alford St.	Azusa	CA	91702	GO	SG	7.00	4.62

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL				MAILING				CROP TYPE	Waters hed	ACREAGE	
			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED
11	Acosta Growers Inc.	Heriberto Acosta/Eddie Acosta	8620015270 8620015272 8620005271 8620024273 8620024272 8621025271 8621025270 8621015270 8621016272 8620015270 8620015272 8620022270 8620024272 0233005803	669 S Azusa Ave	Azusa	DWP	18012 E. Alford St.	Azusa	CA	91702	GO	SG	10.00	3.13
18	AY Nursery, Inc.	Hugo Ayon	6233003802 6233003800 6232016801 6232016800 6232016802 6232017804 6232017803	10115 South Garfield Ave	South Gate	SCE	P. O. Box 4115	Riverside	CA	92514	GO	LA	4.5	3.50
19	Boething Treeland Farms, Inc.	Bruce Pherson	2047001001 2047001005 2047001002 2044020022 2047001001 2047001002 2047001004 2047001005	23475 Long Valley Road	Woodland Hills		23475 Long Valley Road	Woodland Hills	CA	91367	GO	LA	32.00	14.68
24	Calscape Growers	Chester (Dan) Robinson	5860004004	2103 Villa Heights Rd	Pasadena		2103 Villa Heights Rd	Pasadena	CA	91104	GO	LA	0.25	0.20
26	Moon Valley	Armando Rodriguez	2317019900 2317018900 2317017900 2317018900 2317019900	11745 Sherman Way	North Hollywood	DWP	3214 Oakdell Road	Studio City	CA	91604	GO	LA	5.30	5.30
27	Certified Plant Growers, Inc.	Tom Miesen	8021020800 8021008806 8021008802 8021008801 8021008902	10400 Downey/Norwalk Rd	Norwalk		P.O. Box 1696	Temecula	CA	92593	C	SG	10.00	6.50
28	Certified Plant Growers, Inc.	Tom Miesen	8021005915 8021004801 8021004800 8021004805 8021004804	10524 E Firestone Blvd	Norwalk		P.O. Box 1696	Temecula	CA	92593	C	SG	2.50	1.50

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL				MAILING				CROP TYPE	Waters hed	ACREAGE	
			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED
33	Color Spot Nurseries, Inc.	Dixon Suzuki	7330008902 7330009901 7330009904 7406026913 7330009909 7330009910 7330009908 7330009907 7330009905 7330009903 7330009911	321 W. Sepulveda Blvd	Carson		321 W Sepulveda Blvd.	Carson	CA	90745	C	D	31.55	18.50
34	Corey Nursery Co.	Jeff Corey	8307002032	1650 Monte Vista Avenue	Claremont		P. O. Box 609	Claremont	CA	91711	GO	SA	6.80	3.00
35	Cyclamen Growers Inc.(dba C Grows)	Tomoko Copon	2530003017 2530003018	11545 Kagel Canyon St	Sylmar		11545 Kagel Canyon St.	Sylmar	CA	91342	GO	LA	3.54	2.60
41	Esequiel Nursery	Esequiel Hernandez/ Perla Hernandez	6222005273	9000 Atlantic Ave	South Gate	DWP	9000 Atlantic Ave.	South Gate	CA	90280	GO	LA	2.5	2.40
46	F K Nursery, Inc.	Eric Kageyama	4261037001 4261037005 4261037006 4261037007 4261037004 4261037008	2027 Colby Ave	Los Angeles		2027 Colby Avenue	Los Angeles	CA	90025	GO	SM	1.46	0.92
50	Carreon Nursery	Guadalupe Carreon / Adriana Carreon	5277023802 5277023803 5277023804 5277023805	7900 La Merced Road	Rosemead	SCE	472 Giano Avenue	La Puente	CA	91744	GO	LA	6.16	6.00
56	Ricardo's Nursery	Ricardo Arrivillaga	7116016802 7116016801	6850 Atlantic Ave	Long Beach	SCE	6850 Atlantic Ave	Long Beach	CA	90805	GO	LA	9.00	7.00
60	Green Thumb Nursery	Frank Soriano	2012022012 2012022015 2012022011 2012022010 2012022014 2012022007	7659 Topanga Canyon Blvd	Canoga Park		7659 Topanga Cyn Blvd	Canoga Park	CA	91305	GO	LA	19	10.00
61	My Hoa Farm	Han Luong	7165012282 7165013274	5760 Allington Street	Lakewood	DWP	5726 Candor St.	Lakewood	CA	90713	R	SG	5.25	2.50
64	H & H Nursery	Robert Reyes	7168033800 7168033801 7168033274 7168033289 7168033285	6220 Lakewood Boulevard	Lakewood	SCE	6220 Lakewood Blvd.	Lakewood	CA	90712	M	SG	5.50	2.50

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL				MAILING				CROP TYPE	Waters hed	ACREAGE	
			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED
			4041013016 4041013017 4041013018 4041013019 4041013014 4041013013 4042031010 4042031009 4042031008 4042031007 4042031006											
65	Hawthorne Nursery, Inc.	Kei Nakai	4042031005	4519 W. El Segundo Bl	Hawthorne		4519 W. El Segundo Blvd.	Hawthorne	CA	90250	GO	D	2.87	2.50
68	Hoyt Family Vineyard	Carol & Steven Hoyt	4467018025	5929 Kanan Dume Rd	Malibu		5929 Kanan Dume Road	Malibu	CA	90265	V	SM	1.50	0.80
69	Humedo Nursery	Martin Torres	6139004271 6139004273	860 East Redondo Beach Boulevard	Compton	DWP	P.O. Box 40299	Long Beach	CA	90804	GO	D	2.00	1.83
70	Humedo Nursery	Martin Torres	6283024801	10040 Imperial Highway	Downey		P.O. Box 40299	Long Beach	CA	90804	GO	SG	3.00	2.20
73	International Plant Growers, Inc.	Peter Landowski / Jeff Nakasone	7409020009	24500 Vermont Ave	Harbor City		24500 Vermont Avenue	Harbor City	CA	90710	C	D	7	4.00
75	Bridgeman Ranch	Alexandre Bridgeman / Bob Tobias (Main contact)	4452014006	3415 Cross Creek Rd	Malibu		3415 Crosscreek Rd.	Malibu	CA	90265	O	SM	9.92	5.00
78	Centeno's Nursery & Landscaping	Jose Centeno / Rene Centeno	6106013800	17600 S. Western Ave	Gardena	SCE	17514 S. Figueroa St.	Gardena	CA	90248	GO	D	4.39	3.00
79	Centeno's Nursery & Landscaping	Jose Centeno / Rene Centeno	7339006800 7339002803 7339003801 7339003800 7339007802	17514 S. Figueroa Street	Gardena	SCE	17514 S. Figueroa St.	Gardena	CA	90248	GO	D	7.70	6.00
81	Centeno's Nursery & Landscaping	Jose Centeno / Rene Centeno	7113014800	6850 N. Paramount Blvd	Long Beach	SCE	17514 S. Figueroa St.	Gardena	CA	90248	GO	SG	4.70	3.00
82	Damas Nursery	Julian Damas / Yuniva Pierce	6351036800 6351036801 6351036802 6351036803 6351036804 6351036805	6265 E. Hereford Dr.	E. Los Angeles		8210 Passons Blvd	Pico Rivera	CA	90660	GO	LA	7.00	5.00
105	Live Art Plantscapes, Inc.	Larry Tabeling	2763001904 2763030900	18809 Plummer St	Northridge	DWP	3351 La Cienega Place	Los Angeles	CA	90016	GH	LA	3.91	3.91
107	Riverview Farm/Dolphinhead Vineyard Associates	Marty Cable	4472028022	3640 Noranda Lane	Malibu		3640 Noranda Ln	Malibu	CA	90265	V	SM	1.80	0.75
108	Marcelino Contreras	Marcelino Contreras	7326019800	Vera and E 213th St.	Carson		1702 E 213th St.	Carson	CA	90745	R	D	1.00	1.00
110	Glendora Gardens	Melina Serrandino	8641001274 8641001273	1132 S Grand Avenue	Glendora	DWP	1132 S. Grand Avenue	Glendora	CA	91740	M	SG	6.84	6.84
114	Mariposa Garden	Ron Hill	7049014904	6664 South Street	Lakewood		6664 South Street	Lakewood	CA	90713	GO	SG	4.00	3.61
117	Nick's Nursery	Nicolas Alvarado	2310006900 2310007900	11800 Roscoe Blvd.	Sun Valley	DWP	11800 Roscoe Blvd	Sun Valley	CA	91352	GO	LA	3.40	3.40
118	C Stars Nursery, Inc.	Armida Torres or Norma Gonzales	7319002806	1400 West Greenleaf Boulevard	Compton	SCE	P O Box 342	Gardena	CA	90247	C	D	4.50	2.50

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL				MAILING				CROP TYPE	Waters hed	ACREAGE		
			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED	
119	C Stars Nursery, Inc.	Armida Torres or Norma Gonzales	6111023800	17654 South Normandie Avenue	Gardena	SCE	P O Box 342	Gardena	CA	90247	C	D	8.00	4.00	
			5387037800 5388036800 5388036801 5388038802 5388038803 5388038800 5388038801												
125	Norman's Nursery, Inc.	Nancy Norman	5388038801	1150 E Broadway	San Gabriel	SCE	8665 E. Duarte Rd.	San Gabriel	CA	91775	GO	LA	10.40	7.00	
			5376008800 5376008801 5376008802	8633 Duarte Rd North	San Gabriel	SCE	8665 E. Duarte Rd.	San Gabriel	CA	91775	GO	LA	12.49	9.73	
			5282031901 5282031900 5282028904 5282028902 5282028903	1601 Loma Ave	El Monte		8665 E. Duarte Rd.	San Gabriel	CA	91775	GO	SG	9.13	7.30	
131	Norman's Nursery, Inc. (Army Corp Of Engineers)	Nancy Norman	5381009815 5381009814 5381009816 5381009817 5381015805	8624 Duarte Rd South	San Gabriel	SCE	8665 E. Duarte Rd.	San Gabriel	CA	91775	GO	LA	8.63	6.50	
			7502006802 7502006803 7502004806 7502004807 7502001803 7502001804 7502001802	814 N. Pacific Coast Hwy	Redondo Beach	SCE	814 N. Pacific Coast Hwy.	Redondo Beach	CA	90277	M	SM	2.50	1.00	
132	Norman's Nursery, Inc.	Nancy Norman	Peter Serrato / Teresa Serrato	4151012800 4151013800	2501 Manhattan Beach Boulevard	Redondo Beach		6001 E Los Angeles Avenue	Somis	CA	93066	GO	D	4.78	3.00
			7339008913 7339008911 7339007901	565 W. 189th Street	Gardena	DWP	17514 S. Figueroa St.	Gardena	CA	90248	GO	D	4.67	3.60	
141	Performance Nursery, Inc.	Tom Lucas	4151012800 4151013800	19121 Hawthorne Blvd	Torrance	SCE	19121 Hawthorne Blvd.	Torrance	CA	90503	GH	D	5.00	1.00	
145	Centeno's Nursery & Landscaping	Jose Centeno / Rene Centeno	7339007901	Newton Cyn & Kanan Rd	Malibu		Raleigh Enterprises, 100 Wilshire Blvd., 8th Floor	Santa Monica	CA	90401	V	SM	25.00	25.00	
151	Rainforest Flora Inc	Jerry Robinson	7522006800	4464027018 4464027013	8538-8601 Longden Ave	San Gabriel	SCE	8626 E. Grand Ave.	Rosemead	CA	91770	GO	LA	7.00	6.50
152	Rancho Escondido Vineyard	George Rosenthal	5381015802 5381015806 5381015807 5381015808	8626 E. Grand Ave.	Rosemead	SCE	8626 E. Grand Ave.	Rosemead	CA	91770	GO	LA	4.50	4.00	
158	Sakaida Nursery, Inc.	Mike Gutierrez	5389005800 5389005803	6544 N. Vista Street	Monterey Park		632 South San Gabriel Blvd.	San Gabriel	CA	91770	GO	LA	4.00	3.00	
159	Sakaida Nursery, Inc.	Mike Gutierrez	5389005803	2015 Potrero Grande											
160	Sakaida Nursery, Inc.	Mike Gutierrez	5381011011												
162	San Gabriel Nursery & Florist	Fred Yoshimura/ Mary Swanton	5276018003												

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL				MAILING				CROP TYPE	Waters hed	ACREAGE	
			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED
			5373028024 5373028025 5373028026 5373028027 5373028028 5373028029 5373028036 5373028009 5373028010 5373028011 5373028012 5373028013 5373028014 5373028015 5373028016 5373028017 5373028018 5373028019 5373028020	632 S San Gabriel Blvd	San Gabriel		632 South San Gabriel Blvd.	San Gabriel	CA	91776	M	LA	2.00	1.89
164	San Gabriel Nursery & Florist	Fred Yoshimura / Mary Swanton	7055008800	19900 S Pioneer Blvd	Cerritos	SCE	19900 S. Pioneer Blvd.	Cerritos	CA	90703	GO	SG	6.00	4.75
168	S Y Nursery, Inc.	Patty Yasutake	7521012800 7521001802 7522006800 7520009801	Between Firmona Ave. / N. Beryl St.	Torrance		5221 Arvada Street	Torrance	CA	90503	GO	SM	21.25	13.50
171	T-Y Nursery, Inc.	Terry Yasutake	7502012800 7502008804 7502008802 7502008805 7502008800 7502013800	Between Flagler Ln. / N. Paulina Ave.	Redondo Beach		5221 Arvada Street	Torrance	CA	90503	GO	SM	12.00	7.50
176	T-Y Nursery, Inc.	Terry Yasutake	7311013800 7311017800	3698 Caspian Avenue	Long Beach	SCE	3698 Caspian Avenue	Long Beach	CA	90810	C	LA	7.30	5.80
180	Gomez Growers (United Plant Growers/Gomez Growers)	Jose Gomez	2689002910 2689002909	16405 Chase Street	North Hills		16405 Chase Street	North Hills	CA	91343	S	LA	36.00	36.00
184	Valley Sod Farm, Inc.	Dan Gibson												
187	West Covina Wholesale Nursery	Dave Zylstra / Mark Barrios / Olegario Gonzalez	8666021902 8666021904	2820 Amherst Ave	La Verne		P. O. Box 8046	La Verne	CA	91750	GO	SG	5.00	4.50
188	West Covina Wholesale Nursery	Dave Zylstra / Mark Barrios / Olegario Gonzalez	8378022910	West end of Puddingstone West off of Fairplex at Bracket Field / 1420 Puddingstone Dr.	La Verne		P. O. Box 8046	La Verne	CA	91750	GO	SG	20.00	15.25
190	West Covina Wholesale Nursery	Dave Zylstra / Mark Barrios / Olegario Gonzalez	5386015800 5386015801 5386015802 5386015803 5387004801 5387004800 5387004802 5387004803	5820 Burton Ave.	San Gabriel	SCE	P. O. Box 8046	La Verne	CA	91750	GO	LA	15.00	15.00

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			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED
199	Moraga Vineyards	Scott Rich	4368005025 4368006007 4368024020 4368024025	1070 Moraga Dr.	Los Angeles		650 N. Sepulveda Blvd	Los Angeles	CA	90049	V	LA	14.00	6.20
200	C & S Nursery, Inc.	Santiago Rosales II	5025006900	3615 Hauser Bl	Los Angeles	DWP	P.O. Box 642179	Los Angeles	CA	90064	GO	LA	2.50	2.46
202	El Nativo Growers, Inc. (Army Corp of Engineers)	James Campbell	8533010909 8619002903 8533012908	200 S. Peckham	Azusa		200 South Peckham Rd.	Azusa	CA	91702	GO	SG	13.00	10.00
204	Worldwide Exotics Inc.	Michelle Jennings	2528025800	11157 Orcas Avenue	Lake View Terrace	SCE	10260 Arnwood Rd.	Lake View Terrace	CA	91342	GO	LA	6.80	2.00
205	California State Polytechnic University	Duncan McKee/Dave Matias	8709023908 8709023907 8709023910	3801 W. Temple	Pomona		3801 W. Temple Ave.	Pomona	CA	91768	M	SG	1,200.00	70.00
207	Golden Oak Ranch	Steve Sligh	2848010020	19802 Placerita Canyon Rd	Newhall		19802 Placerita Canyon Rd	Newhall	CA	91321	M	SC	890.00	200.00
221	The Malibu Vineyard	Michael McCarty	4451016022 4451016050	3222 Rambla Pacifico	Malibu		3222 Rambla Pacifico	Malibu	CA	90265	V	LA	2.00	2.00
226	Choji Matsushita	Richard Matsushita	8392014036 8392014035	724 N. Cataract Avenue	San Dimas		724 N. Cataract Ave	San Dimas	CA	91773	F	SG	3.80	1.70
228	El Corazon En Las Nubes	Bob Tobias / David Gomez	2058014014	32720 Mulholland Hwy	Malibu	SCE	P.O. Box 577	Agoura Hills	CA	91376	V	LA	5.00	0.90
230	Rancho Mar LLC	Bob Tobias	4457004048	2800 Malibu Canyon Road	Malibu		1250 4th Street	Santa Monica	CA	90401	M	LA	40.00	5.00
233	Nuccio's Nursery, Inc. (Private)	Julius, Tom & Jim Nuccio	5830018003	3555 Chaney Trail	Altadena		3555 Chaney Trail	Altadena	CA	91001	GO	LA	78.00	5.00
236	Amigos Nursery, LLC	Sergio Vasquez	6049009285	1420 E. 92nd Street	Los Angeles	DWP	P.O. Box 927	Downey	CA	90241	GO	LA	12.86	12.86
238	Zuma Canyon Orchids	George Vasquez	4467024003	5949 Bonsall Drive	Malibu		5949 Bonsall Dr.	Malibu	CA	90265	GH	LA	3.89	1.20
239	California Nurseries	Jose Gutierrez	2647025900	14301 Van Nuys Blvd	Arleta	DWP	P.O. Box 2778	North Hills	CA	91393	GO	LA	3.88	3.88
240	California Nurseries	Jose Gutierrez	2784009902	18955 Roscoe Blvd	Northridge	DWP	P.O. Box 2778	North Hills	CA	91393	GO	LA	8.30	8.30
246	Dolin Malibu Estates	Elliott Dolin	4467018045	5970 Cavalleri Rd	Malibu		5970 Cavalleri Rd	Malibu	CA	90265	V	SM	1.80	0.80

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			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED
255	Organicado	Farid Shalabi and Sahar Shalabi	8527025022	460 Old Ranch Rd	Bradbury		13985 Live Oak Ave	Irwindale	CA	91706	O	LA	5.00	1.00
256	Pro Growers, Inc.	Sal Mora/Juan Perez	6230023801 6230023800	8303 S. Scout Ave	Bell Gardens	SCE	8303 S. Scout Ave	Bell Gardens	CA	90201	GO	LA	13.00	8.00
264	Ben K Bonsai	Young Min / Edward Min	5284020801 6575016270	2301 Kelburn Ave	Rosemead	SCE	2301 Kelburn Ave	Rosemead	CA	91770	GO	LA	1.60	0.75
266	Girasol Nursery	Angela Montoya	5272005273 2320001902	8555 Spruce St	Pico Rivera	DWP	PO Box 6862	Pico Rivera	CA	90661	GO	LA	3.00	2.92
267	Jackson Shrub Supply, Inc.	Gary Jackson	2320008904 2320009902 2320006907 2320005904 2320005903	11505 Vanowen St	North Hollywood	DWP	11505 Vanowen St	North Hollywood	CA	91605	GO	LA	9.00	7.63
272	Paramount Nursery	Cecilio Cabral / Magaly Cabral	2531016801 2530006800	11944 Terra Bella St	Lake View Terrace	SCE	9848 Ramona Ave	North Hills	CA	91343	GO	LA	7.00	5.00
274	SAM Trust- Amalfi Vineyard	Andrea Spencer	4425005032	1515 Amalfi Dr	Pacific Palisades		Breslauer, Rutman and Anderson, 11400 Olympic Blvd, Ste 550	Los Angeles	CA	90064	V	SM	5.00	1.00
276	AJ Nursery, Inc.	Juan Ramos / Augustin Cazarez	7318001802 7318001801	1600 S. Wilmington Ave	Commerce	SCE	1600 S. Wilmington Ave	Commerce	CA	90220	GO	D	6.5	5
279	Castaneda Nursery	Salud Castaneda	6332018818 6332018815 6332018809 6332018811	6270 Slauson Ave	Commerce	DWP	11500 Blanding St.	Whittier	CA	90606	GO	LA	0.63	0.63
280	Castaneda Nursery	Salud Castaneda	5263037804 5263037801 5263037802 5263037805	1690 Isabella Ave.	Monterey Park		11500 Blanding St.	Whittier	CA	90606	GO	LA	5.00	4.00
282	Garden View Inc.	Julie Meahl	8535020902 8535020801 8535020800	12901 Lower Azusa Rd	Irwindale	SCE	114 E. Railroad Ave	Monrovia	CA	91016	GO	IP	10.00	5.00
286	LB Palm Growers/Moon Valley	Armando Rodriguez Cipriano Martinez	7107004800	17020 Downey Rd.	Bellflower	SCE	19820 N. 7th St., Suite 260	Phoenix	AZ	85024	GO	LA	4.50	4.00
289	MB Landscaping and Nursery	Maria Martinez	7336004010	20300 S. Figueroa St	Carson	DWP	20300 S. Figueroa St.	Carson	CA	90745	GO	D	2.50	2.50
290	MB Landscaping and Nursery	Maria Martinez	6126009802	201 E Walnut Street	Carson		20300 S. Figueroa St.	Carson	CA	90745	GO	D	6.20	5.00
292	MB Landscaping and Nursery	Maria Martinez	6134008270 6134001271 6134001270	700 135th St.	Los Angeles	DWP	20300 S. Figueroa St.	Carson	CA	90745	GO	D	6.20	5.70
294	Premium Trees, LLC / Moon Valley	Armando Rodriguez Cipriano Martinez	5268005801 5268005802	2600 W Lincoln Ave	Montebello	SCE	19820 N. 7th St., Suite 260	Phoenix	AZ	85024	GO	SG	16.50	7.00
296	Gomez Growers (United Plant Growers/Gomez Growers)	Jose Gomez	7048015801 7048015802	5150 Knoxville Ave	Lakewood	SCE	3698 Caspian Avenue	Long Beach	CA	90810	C	SG	3.50	3.00

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298	Vineland Growers Nursery	Fidel Montenegro/ Gaby Ruiz	2414003902 2414003901	6200 Vineland Ave	North Hollywood	DWP	6200 Vineland Ave	North Hollywood	CA	91606	GO	IP	5.00	2.00
299	V & N Nursery	Jose Uribe	2126014900 2126015902	18841 Hart St	Reseda	DWP	10953 Lindblade St. 3948 Sepulveda Blvd.	Culver City	CA	90232	GO	LA	3.00	1.65
302	Ramirez Strawberry Ranch	Rigoberto Ramirez	7317015805 7317015806	3511 Santa Fe Ave.	Long Beach		2710 Delta Ave	Long Beach	CA	90810	R	IP	2.50	2.00
305	Alonso Vineyard	Juan Alonso	3214043017 3214043027 3214020064 3214020044	12625 Sierra Hwy	Santa Clarita		9124 E. Gallatin Rd.	Pico Rivera	CA	90660	V	IP	39.00	6.50
314	Plascencia Nursery	Maria Silva	8551011270 8551011271 8556099272	12920 Ramona Blvd	Baldwin Park	DWP	PO Box 1952	Temple City	CA	91760	GO	SG	7.84	7.84
320	Brightview / Valley Crest Tree Company	Robert Crudup	2548001011	9500 Foothill Blvd	Sunland		3200 West Telegraph Rd.	Fillmore	CA	93015	GO	LA	10.00	5.00
326	American Growers Plus, Inc.	Nick A. Gomez	2103012901	18830 Strathem St.	Reseda	DWP	18436 E. Section Center St.	Covina	CA	91722	IP	LA	1.05	1.05
330	Arny's Garden	Arny Gonzales	7337005273	South of the 405 Fwy & North of Carson St.	Carson	DWP	3650 Pine Ave.	Long Beach	CA	90807	IP	D	1.19	1.19
338	Classic Landscaping & Nursery	Sam Mozes	2127014006 ?	18756 Erwin St.	Tarzana	DWP	18756 Erwin St.	Tarzana	CA	91335	IP	LA	6.88	6.88
355	Green House Nurseries, Inc.	Mark Whitten	2642021900	9400 Canterbury Ave.	Arleta	DWP	9400 Canterbury Ave.	Arleta	CA	91331	IP	LA	3.48	3.48
379	Rose Lane Farms	Lynne Vinkovic	8940360433	1217 Oak Grove Dr.	Los Angeles	DWP	1217 Oak Grove Dr.	Los Angeles	CA	90041	IP	LA	1.00	0.50
385	New View Landscape, Inc./Green View Nursery	Michael Stell	2763002900 2763030901 2763001905	18590 Lassen St.	Northridge	DWP	24860 Calabasas Rd.	Calabasas	CA	91302	IP	LA	14.41	14.41
386	Green View Nursery/New View Landscape, Inc.	Michael Stell	2731012901	West of Lindley between San Jose and Devonshire	Northridge	DWP	17566 Chase St.	Northridge	CA	91325	IP	LA	5.10	5.10
387	Aguilar Products	Pascual Aguilar	IP	West of Stanford Ave, between Alondra and Flower Ave.	Los Angeles	DWP	149 E. 78th St.	Los Angeles	CA	90003	IP	LA	1.18	1.18
392	Roscoe Nursery	Gustavo Ramirez	2305003900 2305002018 2305001900	12741 Cantara St. North Hollywood, CA 91605	North Hollywood	DWP	12741 Cantara St. North Hollywood, CA 91605	North Hollywood	CA	91605	IP	LA	1.86	1.86
403	San Gabriel Nursery & Florist	Fred Yoshimura / Mary Swanton	IP	714 S. Gladys Ave.	San Gabriel		632 South San Gabriel Blvd.	San Gabriel	CA	91776	IP	IP	0.75	0.39
423	Robles Nursery	Jorge Robles-Cervantes	IP	Oxnard St. & Riverton Ave.	North Hollywood	DWP	IP	IP	CA	IP	IP	IP	0.80	0.80
428	MB Landscaping and Nursery	Maria Martinez	IP	5531 Leeds St.	South Gate	DWP	20300 S. Figueroa St.	Carson	CA	90745	GO	D	1.99	1.99
430	Classic Landscaping & Nursery	Sam Mozes	IP	9090 Laurel Canyon Blvd.	Sun Valley		18756 Erwin St.	Tarzana	CA	91335	IP	LA	1.00	1.00

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			APN	ADDRESS	CITY	DWP/SCE	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED
ADD ABOVE THIS CELL														

TOTALS

117

3068.87 856.80

IP In Progress - still gathering information

Watersheds:

D	Dominguez Channel LA/Long Beach Harbors WMA	20	94.02
LA	Los Angeles River Watershed	57	314.62
SC	Santa Clara River Watershed	1	200
SG	San Gabriel River Watershed	22	172.2
SM	Santa Monica WMA	10	56.27
SA	Santa Anna River Watershed (Located in the Santa Ana Region)	1	3
IP	In Progress	6	16.69

Operations

94.02
314.62
200
172.2
56.27
3
16.69

Irrigated Acres**Crop Type:**

F	Cutflower	1	1.7
GO	Ornamental	71	386.67
C	Color Plants	8	45.8
V	Vineyard	9	43.95
GH	Greenhouse	3	6.11
O	Orchard	2	6
S	Sod	1	36
M	Multiple	7	287.23
R	Row Crop	3	5.5
IP	In Progress	12	37.84

Operations

1
71
8
9
3
2
1
7
3
12

Irrigated Acres

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL			MAILING				CROP TYPE	Watershed	ACREAGE		PAPERWORK			EDUCATION				GROUP DUES						
			APN	ADDRESS	CITY	DWP	ADDRESS	CITY	STATE			TOTAL	IRRIGATED	Info	General Q	BMP Q	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022	
															X = COMPLIANT		X = COMPLIANT										
2	Ayon Nursery	Adriana Ayon - Jesus Ayon	8207019801 8207019802	16448 Haliburton Rd	Hacienda Heights		16448 Haliburton Rd	Hacienda Heights	CA	91745	GO	SG	6.00	5.00													
17	Arbor Nursery Plus	Tony Rodriguez	8610001800 8602011801 8602011800 8602010800	2865 Royal Oaks Dr	Duarte		P O Box 398	Azusa	CA	91702	GO	SG	8.00	6.00	X	X	X										
31	Moon Valley Nursery	Armando Gonzalez	8110029910 8110029904 8110029905 8110029906 8110029907 8110029908 8115002908 8115002907 8115002906 8115002800 8115002905 8115002904 8115002801 8115001801 8115001908 8115001800 8115001909	170	La Puente		3000 B Street	La Verne	CA	91750	GO	SG	62.00	48.00	X	X	X	X									
32	Moon Valley Nursery	Armando Gonzalez	8381009014 8381009002	3000 B Street	La Verne		3000 B Street	La Verne	CA	91750	GO	SG	15.00	15.00	X	X	X	X									
37	Lucky Plants Nursery	Steven Chu	4085026800	17715 Amie Ave.	Torrance		1062 Aviation Blvd.	Hermosa Beach	CA	90254	IP	D	3.75	2.50												X	
39	Dave's Four Seasons Wholesale Nursery	Dave Martinez	5277028802 5277023807	7701 Mooney Drive	Rosemead		8138 Blewett St.	Rosemead	CA	91770	GO	SG	1	0.57	X	X	X										
40	Mikamo Nursery	Edith Mikamo	7344007038 7344007039	1029 W. 223 Street	Torrance		1029 W. 223 Rd St.	Torrance	CA	90502	F	D	1.00	0.75	X	X	X									X	
42	Fausto's Nursery	Fausto Garcia / Eduardo Garcia	7165020270 7165020800	5759 Allington St	Lakewood	SCE	15317 McRae St.	Norwalk	CA	90650	GO	SG	5.00	4.00	X	X	X									X	
44	Green Leaf Nursery	Fermin Gutierrez	8177001802 8177001801 8177001800 8177001805	10490 Washington Blvc	Whittier		PO Box 2215	Pico Rivera	CA	90660	GO	LA	5.20	3.00	X	X	X	X									
45	Shima Nursery	Frank Tushima / Roger Tushima	5389006807	8625 Grand Ave	Rosemead		8625 E. Grand Ave	Rosemead	CA	91770	GO	LA	2.90	1.30	X	X	X	X									
53	New West Growers, Inc.	Grace Hernandez	7318004803	1601 S. Santa Fe Ave	Compton	SCE	1413 Kenneth Rd. #227	Glendale	CA	91201	GO	LA	3.50	1.70	X	X	X									X	
54	New West Growers, Inc.	Grace Hernandez		110 West Greenleaf	Compton	SCE	1413 Kenneth Rd. #227	Glendale	CA	91201	GO	LA	3.00	1.00	X	X	X									X	
55	Moneta Nursery, Inc.	Gary Ishii	6115019043 6115019044 6115019045 6115019042	13633 South Vermont Avenue	Gardena		13633 S. Vermont Avenue	Gardena	CA	90247	M	D	4.75	3.00	X	X	X									X	
57	LA Sanchez	Eusebio Sanchez	6385005800 6385005801 6385016800 6385016801	8406 Pico Vista Dr.	Pico Rivera	SCE	11159 1/2 Kauffman St.	El Monte	CA	91731	GO	SG	2.70	1.50	X	X	X										
58	GM Nursery	Juan Diaz	5283015806	2563 Angelus Ave	Rosemead	SCE	2563 Angelus Ave	Rosemead	CA	91770	GO	LA	4.00	3.00	X	X	X										
62	Hernandez Nursery	Eric Hernandez	5047014902	5501 Rodeo Rd	Los Angeles	DWP	5501 Rodeo Rd	Los Angeles	CA	90016	GO	SM	3.00	2.70												X	
66	Hill Grove Nursery	Raul Mejia	5266018801 5266017802 5266017800 5262028800	450 West Almor	Monterey Park		PO Box 92966	City of Industry	CA	91715	GO	IP	3.50	2.00	X	X										X	
74	Jorge's Nursery	Jorge Alcaraz	7318003809 7318003808 7318003811 7318003807	100 E Greenleaf Blvd	Compton		4867 Daisy Ave	Long Beach	CA	90805	GO	LA	6.50	5.00	X	X	X									X	
84	Cerritos Growers	Jose de Jesus Gallo / Maria Silva	7050005800	19805 Gridley Rd	Cerritos		4943 Buffington Rd	El Monte	CA	91732	GO	SG	3.5	3.00	X	X	X									X	
91	Kobata Growers, Inc.	Jack Mayesh	4096005800 4096005801 4096005802	17622 Van Ness Avenue	Torrance	SCE	17622 Van Ness	Torrance	CA	90504	GO	D	1.01	1.01	X	X	X									X	

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			APN	ADDRESS	CITY	DWP	ADDRESS	CITY	STATE			TOTAL	IRRIGATED	Info	General Q	BMP Q	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022		
														X = COMPLIANT				X = COMPLIANT				X = COMPLIANT				X = COMPLIANT		
92	Kobata Growers, Inc.	Jack Mayesh	4095001800 4095001802	17629 Van Ness Avenue	Torrance	SCE	17622 Van Ness	Torrance	CA	90504	C	D	6.50	6.50	X	X	X						X					
94	Gardena Nursery & Landscape Maintenance	Janet Mercado	6121004901	551 W. 168th Street	Gardena	DWP	551 W. 168th St.	Gardena	CA	90248	GO	D	1.60	1.60										X				
95	Wilmington Nursery	Rodrigo Ramirez (New Owner)	7404034900	898 Deloras Drive	Wilmington	DWP	898 E Deloras Drive	Carson	CA	90745	GO	D	3.50	2.50	X	X	X							X				
96	Ruiz Nursery	Jose Ruiz	7318006801	7045 N. Long Beach Blvd	Long Beach		7045 N. Long Beach Blvd	Long Beach	CA	90805	GO	LA	4.16	2.00	X	X	X											
98	Jauregui Nursery, LLC	Filiberto Jauregui	7336009271	20300 Main	Carson	DWP	4185 Paseo de Oro	Cypress	CA	90630	GO	D	5.00	5.00										X				
100	Jauregui Nursery, LLC	Filiberto Jauregui	6120025900 6120024900 6120026902 6120027901	551 West Alondra	Gardena	DWP	4185 Paseo de Oro	Cypress	CA	90630	GO	D	5.70	5.70										X				
101	Jauregui Nursery, LLC	Filiberto Jauregui	7048021271 7061008270 7061008275 7061008276	6449 Del Amo Blvd.	Lakewood	DWP	4185 Paseo de Oro	Cypress	CA	90630	GO	SG	3.10	1.73										X				
106	LOMITA PLANT GROWERS INC. / Growers Nursery	Jose Sanabria	7404030900	835 E Lomita Blvd	Wilmington	DWP	835 East Lomita Blvd.	Wilmington	CA	90744	GO	D	3.03	3.03										X				
112	Mezcala Nursery	Sergio Vargas	7116001800	6901 Orange Ave	Long Beach	SCE	7016 Sherman Way	Bell	CA	90201	GO	LA	3.00	2.00	X	X	X							X				
113	Magic Growers, Inc.	Bob & Leilani Underwood	5751022801 5860013800 5857035901	2795 Eaton Canyon Drive	Pasadena	SCE	2795 Eaton Canyon Drive	Pasadena	CA	91107	GO	LA	8.00	8.00	X	X	X	X										
120	Cerritos Nursery, LLC	Ken Zhang/Bailey Yang	7056013800	19820 Norwalk Blvd	Cerritos		19820 Norwalk Blvd.	Cerritos	CA	90703	GO	SG	4.50	4.50	X	X	X							X				
121	Lloyd's Nursery / Nakayama Nursery Inc	Lloyd Nakayama	6115013007 6115013008 6115013009 6115013010 6115013011	1341 W. 141st Street	Gardena		1341 W 141st Street	Gardena	CA	90247	GO	D	0.75	0.75														
134	Sempervirens Botanical Company	John Low	4096001054	18715 S Western Ave	Gardena		18715 S Western Ave	Gardena	CA	90248	C	D	2.00	0.50	X	X	X											
135	Okada Nursery, Inc.	Herb Okada	7167034270 7167034801 7167034800	6239 Bellflower Blvd	Lakewood	DWP	18715 S Western Ave	Gardena	CA	90248	GO	SG	3.00	3.00				X						X				
142	Sunflower Farms	Ron Akiyama	4096005007 4096005800	17609 S. Western Ave	Gardena		17609 S Western Avenue	Gardena	CA	90247	F	D	4.00	3.50	X	X	X	X										
143	Green Landscape Nursery	Richard Green	2833001087 2833004097	22216 1/2 Placerita Canyon Rd	Santa Clarita		26191 Bouquet Canyon Rd.	Saugus	CA	91350	GO	SC	4.00	3.75	X	X	X							X				
144	Green Landscape Nursery	Richard Green	2809003270	25235 Orchard Village Rd.	Valencia		26191 Bouquet Canyon Rd.	Saugus	CA	91350	GO	SC	3.00	2.00										X				
146	Estanfor Nursery	Rafael Rangel	6134039270	1130 Stanford Ave	Compton	DWP	1017 E. 150th Street	Compton	CA	90220	GO	D	2.22	2.22										X				
149	Vargas Nursery	Oscar Vargas/ Reuben Vargas	7162001274	17020 Passage Ave	Bellflower	SCE	3925 E. Elizabeth St	Compton	CA	90221	GO	SG	1.75	1.75	X	X	X							X				
154	Rolling Hills Nursery	Esteban Villafana / Koji Shimohara	7116001800	6944 Orange Ave	Long Beach		PO Box 789	Paramount	CA	90723	GO	LA	8.00	6.00				X						X				
161	Salco Growers	Frank Spina	7165001270 7165001271 7165001275 7165001272 7165019270 7165001801 7165001800 7165019800 7165019801 7165019805	6236 Bellflower Rd	Lakewood	DWP	6236 Bellflower Blvd	Lakewood	CA	90713	C	SG	4.00	3.86	X	X	X						X					

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														X = COMPLIANT				X = COMPLIANT				X = COMPLIANT						
271	Melhill Vineyard	Tish Lehew / Jeff Lotmar	4432011045	1805 Melhill Way	Los Angeles		1805 Melhill Way	Los Angeles	CA	90049	V	SM	0.3	0.3		X	X	X					X					
277	Abeja Nursery	Marlene / Dimas Carbajal Abeja	4089016802	18601 Ermanita Ave.	Torrance	SCE	18601 Ermanita Ave.	Torrance	CA	90504	GO	D	4	3														
278	Bertha's Gardens/Western Gardens	Paul Diehl	2731024901 2729024901	18451 Lassen St.	Northridge	DWP	18451 Lassen St.	Northridge	CA	91325	GO	LA	2.50	1.21		X	X	X					X					
281	Fairgrove Nursery	Reuben Martinez / Liz Martinez	8471002804 8471002805	14855 Fairgrove Ave	La Puente	SCE	14826 Fairgrove Ave	La Puente	CA	91744	GO	SG	2.50	2.00		X	X	X					X					
283	Gardena Hills Nursery	Gilberto Lopez	6089023282	12597 S Budlong Ave	Los Angeles	DWP	2579 E. 219 St.	Long Beach	CA	90810	GO	IP	4.66	4.66		X	X	X						X				
284	House of Bonsai	Victoria Lee	7048012800 7048012801 7048012802	5214 Palo Verde Avenue	Lakewood	SCE	5214 Palo Verde Avenue	Lakewood	CA	90713	GO	IP	5.00	4.00		X	X	X						X				
285	Rusack Vineyard/Kangaru Enterprises, LLC	Steven Gerbac	7480043020	1 El Rancho Escondido Rd.	Avalon		1825 Ballard Canyon Rd.	Solvang	CA	93463	V	IP	6.40	6.00		X	X	X						X				
287	Maggie's Farm	Nate Pietso / Casey Kramer	2055001032	6500 Chesboro Rd	Agoura Hills		918 11th St #9	Santa Monica	CA	90403	R	IP	4	4														
288	Malibu Organic Lemor	Mike Zacha	4472010023	1872 Encinal Canyon	Malibu	SCE	1700 Decker Canyon Rd	Malibu	CA	90265	O	LA	220	15		X	X	X										
293	N.K. Nursery	Kaz Kitajima	8242016810	780 S. Stimson Ave	City of Industry		780 S. Stimson Ave	City of Industry	CA	91745	GO	IP	2	1		X		X	X					X				
295	Torrance Wholesale Nursery	Margaret Edelman	4089016802	18901 Ermanita Ave	Torrance		18901 Ermanita Ave.	Torrance	CA	90504	GO	D	2	1.87										X				
297	UVA Nursery	Alberto Gomez / Ariana Gutierrez	7339009901 7339009272	19033 Anelo Ave	Gardena	DWP	17516 Scudder Ct.	Carson	CA	90746	GO	D	2.10	2.10		X	X	X						X				
300	Garibaldo's Nursery	Filemon Garibaldo	7160003801 7160003800 7162007800 7162007801	8834 Rose St.	Bellflower	SCE	8834 Rose St.	Bellflower	CA	90706	GO	LA	1.80	1		X	X	X						X				
301	Horizon Nursery	Rafael Rosalez	8007001906 8007001800	9919 Cedardale Dr.	Santa Fe Springs	SCE	9919 Cedardale Dr.	Santa Fe Springs	CA	90706	GO	IP	3.5	2		X	X	X										
303	Western Plants anc Trees	Alberto Reyes	4142011803	12703 Bart Ave.	Hawthorne		13712 Milton Ave	Westminster	CA	92863	GO	IP	0.68	0.5														
304	Chuy's Nursery	Jesus Martinez	5265001808	1996 S. Orange Ave	Monterey Park	SCE	9124 E. Gallatin Rd.	Pico Rivera	CA	90660	GO	LA	3	2														
306	Mimosa Nursery LA	Colette Guyenne	6351035804 6351035803 6351035807	6270 Allston Street	Los Angeles	SCE	6270 Allston Street	Los Angeles	CA	90022	GO	LA	3.30	2.20		X	X	X						X				
307	Hana Star Farms, Inc	Hidehiko Kasahara	8174004800	6509 Pioneer Blvd	Whittier		20646 Markham St.	Perris	CA	92570	R	IP	5.9	2.8										X				
308	Agua Dulce Winery	Judy Kajama	3213014051 ?	9640 sierra highway	Agua Dulce	SCE	9640 Sierra Hwy	Agua Dulce	CA	91390	V	SC	75	62														
309	Pedro Perez Alvarez Nursery	Pedro Perez Elias Alvarez	2666003901	Gaynor St. & Rinaldi St. 11362 Woodley Ave.	Granada Hills	DWP	IP	IP	CA	91344	GO	LA	6.19	3.19		X	X	X						X				
310	Green Touch Nursery	Oscar Vargas	IP	202 S. Mayo Ave.	Compton	SCE	202 S. Mayo Ave.	Compton	CA	90221	GO	IP	5.00	3.00		X	X	X						X				
311	LA Sanchez Nursery	Eusebio Sanchez	8294030800	16525 Circle Hill Ln	Hacienda Heights	SCE	11159 1/2 Kauffman St.	El Monte	CA	91731	GO	SG	1.5	1		X	X	X										
312	Martinez Nursery	Angel Martinez	7165019803	5761 Ashworth St	Lakewood	SCE	PO Box 1665	Bellflower	CA	90707	GO	SG	2.00	1.50		X	X	X	X									
313	Pacific View Nursery	Erik Munoz	4467021002 4467021001	29081 Pacific Coast Hwy	Malibu		29081 Pacific Coast Hwy	Malibu	CA	90265	GO	SM	4.76	4														
315	San Antonio Nursery Corp	Rafael Macias	2538002900 2538003900 2538021901 2538022901	11753 Wicks St.	Sun Valley	DWP	11753 Wicks St.	Sun Valley	CA	91352	GO	IP	16.10	16.10		X	X	X						X				
316	Saticoy Nursery	Armando Orozco Torres	IP	IP	North Hollywood	DWP	11321 Runnymede St	Sun Valley	CA	91352	GO	LA	5.00	5.00		X	X	X						X				
317	Starline Nursery Company	David Mejia	8558023800 8558023801 8558023802	1233 Vineland Ave	La Puente		PO Box 1000	La Puente	CA	91747	GO	SG	4	3.5														
318	Starline Nursery Company	David Mejia	IP	16505 Colima Rd	Hacienda Heights		PO Box 1000	La Puente	CA	91747	GO	SG	2.5	2														
319	Sunshine Food & Nursery	Kevin Wong	5288003801 5288003802 5288003800	8500 Dorothy St.	Rosemead	SCE	8500 Dorothy St.	Rosemead	CA	91770	GO	SG	6.50	5.00		X	X	X						X				
321	Lucky Plants Nursery	Steven Chu	IP	14515 S. Raymond Ave. Gardena, CA 90247	Gardena		1062 Aviation Blvd.	Hermosa Beach	CA	90254	IP	D	3	2.5														
322	Reyes Winery	Robert Reyes	3213016029	10262 Sierra Hwy	Santa Clarita		1227 Buena Vista #C	Duarte	CA	91010	V	SC	16.00	14.00		X	X	X	X									
323	3 Pinos Nursery	Bartolo Lopez S.	2126001901 2126014900	Sherman Way and Wilbur Ave.	Reseda	DWP	8427 Shirley Ave.	Reseda	CA	91324	IP	IP	3.5	1.8		X	X	X				</td						

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325	Juan Aguirre Farms	Juan Gregorio Aguirre	6045019270 6045015271 6045015270 6045015272 6045015273	North of 92nd St, between Fir Ave and Minder St. & North of 92nd St, between Miner St and Juniper St.	Los Angeles	DWP	9806 Anzac Ave	Los Angeles	CA	90002	IP	LA	6.73	6.73	X	X	X							X				
327	American Sprinkler & Cardanali Nursery	IP	IP	23429 Erwin St.	Woodland Hills	DWP	23429 Erwin St.	Woodland Hills	CA	91367	IP	LA	2.05	2.05										X				
328	Craig Vineyards	Daniela Craig	4467018024	5931 Kanan Dume Rd	Malibu		5931 Kanan Dume Rd	Malibu	CA	90265	V	SM	1.8	1	X	X	X											
329	Arnulfo Hernandez Nursery	Lucilla Gil	6132003900 6132004900	East of the 110 Freeway, between 130th St and 135th St, Los Angeles	Los Angeles	DWP	PO Box 609	Lawndale	CA	90260	IP	LA	4.6	4.6											X			
331	Lorenzo Sanchez Nursery	Lorenzo Sanchez	2642001900	14001 Garber St.	Arleta	DWP	14001 Garber St.	Arleta	CA	91331	IP	LA	0.81	0.81											X			
332	Ben-Cherit, Shimon/Ramy's Nursery	IP	2103015903	East of Wilbur Ave. between Blythe St. and Elkwood St.	IP	DWP	5926 Calvin Ave.	Tarzana	CA	91356	IP	IP	3.6	3.6											X			
333	Lam Farm	Billy Lee	IP	13213 Essex Pl.	Cerritos	DWP	6319 California St.	Long Beach	CA	90805	IP	LA	2.84	2.84	X	X	X											
334	Bird of Paradise Nursery	Rogelio Garhlo	5272009277	4112 Paramount Blvd.	Pico Rivera	DWP	4112 Paramount Blvd.	Pico Rivera	CA	90660	IP	LA	0.70	0.70	X	X	X								X			
335	Carlos Mejia Nursery C&Y Nursery	Carlos Mejia	2310008900	11811 Strathern St.	North Hollywood	DWP	11811 Strathern St.	North Hollywood	CA	91605	IP	LA	3	3	X	X	X								X			
337	Gonzalez Nursery	Arturo Carbajal	8125001901	Southeast of the 60 Fwy and North of Pellisier Rd.	Whittier	DWP	1215 N. Stimson Ave.	La Puente	CA	91744	IP	SG	2.4	2.4	X										X			
339	Daniel Velazquez Nursery	Daniel Velazquez	2666003901	11263 Woodley Ave.	Granada Hills	DWP	11208 Degarmo Ave.	Pacoima	CA	91331	IP	LA	1.64	1.64	X										X			
340	David's Nursery	David Martinez	7315037271	909 E. Sepulveda Blvd.	Carson 90745	DWP	503 Pacific St.	Carson	CA	90745	IP	D	3.1	3.1	X									X				
341	Eden Nursery	Trinidad Alcaraz	IP	11600 Berendo Ave.	Gardena	DWP	11612 Culver Blvd.	Los Angeles	CA	90066	IP	D	1.4	1.4	X									X				
342	El Bajio Nursery	Benancio Queme	2625025900	13760 Sunburst St. Areleta	Arleta	DWP	9314 Woodman Ave.	Arleta	CA	91331	IP	LA	1.64	1.64	X									X				
343	El Castillo Nursery	Juan Aguilar	6119006900	555 W. 146th St.	Gardena	DWP	8009 Rose St.	Paramount	CA	90723	IP	D	1.55	1.55	X									X				
344	Environmental Art	Peter Lee	IP	North Side of 152nd St.	Gardena	DWP	PO Box 157	Palos Verdes Estates	CA	90247	IP	D	1.1	1.1	X									X				
345	Exotic Garden Nursery	Jimmy King	2127021900 (8940360300 reported)	18801 Victory Blvd.	Reseda	DWP	18801 Victory Blvd.	Reseda	CA	91335	IP	LA	2.35	2.35	X	X	X							X				
346	F&A Nursery	Francisco Garcia	7162014270	8650 Artesia Blvd.	Bellflower 90706	DWP	13213 Curtis and King Rd	Norwalk	CA	90650	IP	LA	1.32	1.32	X									X				
347	Four Seasons Wholesale Nursery	Dan LaFleur	2763021900 2770001900	18840 Nordhoff St.	Northridge	DWP	1880 Sinaloa Rd.	Simi Valley	CA	93065	IP	LA	12.75	12.75	X									X				
348	Felix Garcia Nursery	Felix Garcia	2310023901	West of Morella Ave between Arminta St. and Stagg St. Los Angeles	Los Angeles	DWP	1314 S. Cliveden Ave.	Compton	CA	90020	IP	LA	1.68	1.68											X			
349	Francisco Garcia Nursery	Francisco Garcia	6369003273 6369005900	East of Crider Ave, between Washington Blvd and the railroad tracks, Pico Rivera	Norwalk	DWP	13213 Curtis and King Rd	Norwalk	CA	90650	IP	LA	2.4	2.4														
350	Gil Hernandez Nursery	Gil Hernandez	6115039270	South of El Segundo Blvd and West of Vermont St, Gardena	Gardena	DWP	10607 San Antonio Ave	South Gate	CA	90280	IP	D	2.6	2.6											X			
351	Gomez Calderon Nursery	Gomez Calderon	6234011274	South of Imperial Hwy and North Gardendale St.	South Gate	DWP	9956 Downey and Sanford Bridge Rd.	Downey	CA	90240	IP	LA	3.8	3.8											X			
352	Grace Farms	Myong H. Koches	7404003278	Intersection of Bonita St. and E. Pacific St.	Carson	DWP	912 W. 11th St. #1	San Pedro	CA	90731	IP	D	0.89	0.89	X									X				
353	Grace Farms	Yung L. Lee	7404004273	Realty St. and Delores Dr. (intersecting Wilmington Ave.)	Carson	DWP	912 W. 11th St. #1	San Pedro	CA	90731	IP	D	1.62	1.62	X									X				
354	Green Effects Inc.	Gary Jackson	2321004901	North of Vose St. between Radford Ave. and Lankershim Blvd.	Los Angeles	DWP	4248 Hilburn Ct.	Moorepark	CA	93021	IP	LA	4.10	4.10	X	X	X							X				
356	Green Set, Inc.	Dan Needham	2320016903	11520 Vanowen St.	North Hollywood	DWP	11617 Dehougne St.	North Hollywood	CA	91605	IP	LA	0.9	0.9	X		X							X				
357	Green Set, Inc.	Dan Needham	2320017901	6732 Camellia Ave.	North Hollywood	DWP	11617 Dehougne St.	North Hollywood	CA	91605	IP	LA	2	2	X		X							X				
358	Green Set, Inc.	Dan Needham	2320009902 2320006907	11617 Dehougne St.	North Hollywood	DWP	11617 Dehougne St.	North Hollywood	CA	91605	IP	LA	6.82	6.82	X		X							X				

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359	Growing Nursery / La Escondida Nursery	Antonio Ayon	6236001270	East of the LA River, between Century Ave. and the 105 Fwy	Paramount	DWP	7306 Walnut Ave.	Paramount	CA	90723	IP	LA	3.84	3.84	X									X					
360	El Dorado Nursery	Eugenia Torres	IP	Southwest of San Fernando Rd and North East of Telfair Ave.	San Fernando	DWP	PO Box 16926	North Hollywood	CA	91615	IP	LA	1.96	1.96	X									X					
361	Green Spot Nursery	Hector Hernandez	2307008900 2307007900	West of Laurel Canyon Blvd, between Saticoy and Stagg St.	Los Angeles	DWP	PO Box 16926	North Hollywood	CA	91615	IP	LA	4.13	4.13	X									X					
362	Mi Jalisco Nursery Oscar Hernandez Nursery	Oscar Hernandez	7165020270	5761Allington St.	Lakewood	DWP	10639 Lakefront Dr.	Norwalk	CA	90650	IP	SG	1.84	1.84	X	X	X							X					
363	International Palm Growers	Henry Cespedes	2642021900	9312 Canterbury Ave.	Arleta	DWP	PO Box 4218	Panorama City	CA	91331	IP	LA	3.4	3.4	X	X	X							X					
364	Isaac Ortega Nursery	Isaac Ortega	IP	11925 Bromont Ave.	Pacoima	DWP	12032 Wimberly Ave.	Sylmar	CA	91342	IP	LA	2.2	2.2										X					
365	Isaias Gonzalez Nursery	Isaias Gonzalez	6310027274	East of Alcoa Avenue, between Slauson and Randolph	Vernon	DWP	1810 Cogswell Rd.	South El Monte	CA	91733	IP	LA	1.87	1.87										X					
366	James T. Jung Nursery	James T. Jung	7404002278	East of Bonita Ave, between Lincoln St and Pacific St, Carson	Carson	DWP	6625 Montaire Pl.	La Palma	CA	90623	IP	D	0.83	0.83										X					
367	Javier's Nursery	Javier Hernandez	7339018902 7339018271 7339018903	610 E. Carson Plaza Dr.	Carson	DWP	337 E. 237th St.	Carson	CA	90745	IP	D	5.76	5.76	X									X					
368	Jesus & Juan Munoz Nursery	Jesus Munoz	2415013901 2415014900 2415015901	East of Whitnall Hwy, between Oxnard St and Cahuenga Blv	North Hollywood	DWP	206 W. Maple St. #E	Glendale	CA	91204	IP	LA	3.04	3.04	X									X					
369	Jesus Macias Gonzalez Nursery	Jesus Macias Gonzalez	2538008900	West of Sutter Ave, between Wicks and San Fernando Rd.	Los Angeles	DWP	11064 Wicks St.	Sun Valley	CA	91352	IP	LA	1.6	1.6										X					
370	Jose Vasquez Nursery	Jose Vasquez	2715012903	East of Chimineas Ave, between Tribune St and Chatsworth St.	Los Angeles	DWP	PO Box 17714	Encino	CA	91416	IP	LA	5	5										X					
371	Juan Aguilar Nursery	Juan Aguilar	6051002900	10718 S. Stanford Ave, Los Angeles	Los Angeles	DWP	922 E. 42nd Pl.	Los Angeles	CA	90011	IP	LA	1	1										X					
372	Juan Otero/Junior's Nursery	Juan Otero/David Martinez	2118001901	18836 Saticoy	Reseda	DWP	6206 Burwood Ave.	Los Angeles	CA	90042	IP	LA	1.78	1.78	X									X					
373	Juarez Nursery	Rolando E. Juarez	8664019270	6375 Wheeler Ave.	La Verne	DWP	8019 S. Hoover St.	Los Angeles	CA	90044	IP	SG	1.30	1.30	X	X	X							X					
374	Junior's Nursery	David Martinez	2156021903	West of Yolanda Ave, between Hatteras and Miranda Ave.	Los Angeles	DWP	240 Robinson Rd.	Pasadena	CA	91104	IP	LA	1.08	1.08	X	X	X							X					
375	First Image Nursery	Julio Deluis Espinoza	IP	East of Fairfax Ave, between Adams and Clyde Ave.	Los Angeles	DWP	1452 S. Ridgley Dr.	Los Angeles	90016	CA	IP	IP	LA	3.87	3.87				X										
376	La Cienega Nursery	Cirilo Gutierrez	IP	8511 Sherwood Dr.	West Hollywood	DWP	PO Box 950825	Mission Hills	CA	91395	IP	LA	3.7	3.7										X					
377	Lopez Nursery	Francisco Lopez	2631011900	11763 Rialto St.	Sun Valley	DWP	8513 Tilden Ave.	Panorama City	CA	91402	IP	LA	1.51	1.51										X					
378	Los Pinos Nursery	Rodolfo Reynoso	2308024900	7860 Whisett Ave	North Hollywood	DWP	7860 Whisett Ave.	North Hollywood	CA	91605	IP	LA	3.15	3.15										X					
380	Macias Nursery	Ignacio Macias	2604041903	15594 Bledsoe St.	Sylmar	DWP	14506 Bledsoe St.	Sylmar	CA	91342	IP	LA	2.24	2.24										X					
381	Raul Martinez Nursery	Raul Martinez	7339008913	565 189 St.	Gardena	DWP	565 189 St.	Gardena	CA	90248	IP	D	1	1										X					
382	Victor Martinez Nursery	Victor Martinez	6242033006	13933 Paramount Blvd.	Paramount	DWP	13933 Paramount Blvd.	Paramount	CA	90723	IP	LA	1.88	1.88										X					
383	Miyako Bonsai Nursery	Kenichiro Kawaguchi	6132006900	552 W. 140th St.	Gardena	DWP	552 W. 140th St.	Gardena	CA	90248	IP	D	2.18	2.18	X									X					
384	Jose Munoz Nursery	Jose Munoz	8115001907 8115001905	Between the 60 and 605 Fwy	Whittier	DWP	12318 Kathleen St.	Whittier	CA	90601	IP	LA	4	4										X					
388	Plantasia, Inc.	Alex Colovic	7107002900 7107002272 7107002271 7107001271	West of Lakewood Blvd., between Alondra and Flower Ave.	IP	DWP	2550 Via Tejon Suite 3F	Palos Verdes	CA	90274	IP	IP	5.87	5.87	X	X	X							X					
389	Ramirez Nursery	Guillermo Ramirez	6132005900	570 W. 135th St.	Gardena	DWP	570 W. 135th St.	Gardena	CA	90248	IP	D	2.96	2.96									X						
390	Rio Verde Nursery	Antonio Garcia/Fidel Reyes	6241001270 6241001271	14809 Downey Ave.	Paramount	DWP	14809 Downey Ave.	Paramount	CA	90723	IP	LA	3.80	1.80	X	X	X						X						
391	RJ's Demolition and Disposal	IP	2604002903	West of San Fernando Rd. between Telfair and Roxford St.	Los Angeles	DWP	1213 S. Fir Ave.	Inglewood	CA	90301	IP	LA	5.24	5.24															

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393	Sienna Arborscape Co.	IP	IP	South of Big Tujunga Canyon Rd. and North of Mt. Gleason Ave.	Los Angeles	DWP	3115 Foothill Blvd. Suite M140	La Crescenta	CA	91214	IP	LA	2.5	2.5										X					
394	Soto Nursery	IP	6120023910 6120023908	600 W. Alondra Blvd.	Gardena 90248	DWP	1058 W. 204th St.	Torrance	CA	90502	IP	D	2.02	2.02										X					
395	Tops Landscape Co.	Yun Kong	IP	18809 Calvert St.	Reseda	DWP	18809 Calvert St.	Reseda	CA	91335	IP	LA	5.64	5.64										X					
396	Wendy's Nursery	Juan Ramirez	IP	West of Laurel Canyon Blvd. between Saticoy and Cohasset	Los Angeles	DWP	PO Box 4916	Panorama City	CA	91412	IP	LA	2.00	1.00	X	X	X							X					
397	Nick Williams Nursery	Nick Williams	2161004907	West of Yoland Ave. between Linnet St. and Wells Dr.	Los Angeles	DWP	1061 Meadows End Dr.	Calabasas	CA	91302	IP	LA	0.69	0.69										X					
398	David Garcia Nursery	David Garcia	IP	28367 San Canyon Rd. Spc 66	Canyon Country	DWP	28367 San Canyon Rd. Spc 66	Canyon Country	CA	91387	IP	IP	0.35	0.35															
399	Saticoy Nursery	Armando Orozco Torres	2307015900 2307015903	West of Laurel Canyon Blvd. between Lull Ave. and Saticoy St.	Los Angeles	DWP	11321 Runnymede St.	Sun Valley	CA	91352	IP	LA	1.20	1.20	X	X	X							X					
400	Acosta Growers Inc.	Heriberto Acosta/Eddie Acosta	IP	17000 Block of Renwick Rd between Homestead Ave and Lark Ellen Ave	Azusa	DWP	18012 E. Alford St.	Azusa	CA	91702	GO	SG	IP	3.72											X				
401	Montage Vineyards	John Gooden		27326 Winding Way	Malibu		400 Del Norte Blvd.	Oxnard	CA	93030	V	IP	1	0.75	X	X	X	X											
402	Fantasy Nursery	Apolonio Diaz	IP	16526 Circle Hill Ln.	Hacienda Heights	SCE	16526 Circle Hill Ln.	Hacienda Heights	CA	91745	GO	SG	3	2	X	X	X	X						X					
405	Jesus Ayon Nursery	Adriana Ayon	IP	7044 Long Beach Blvd.	Long Beach		PO Box 91922	City of Industry	CA	91715	IP	IP	16	14	X	X	X												
406	Gooch Vineyard	Patrice Gaburo	IP	27366 Winding Way	Malibu		27366 Winding Way	Malibu	CA	90265	V	LA	2.6	0.75	X	X	X												
407	American Growers Plus, Inc.	Nick A. Gomez	IP	Wilbur Ave & Strathtern St.	Reseda	DWP	18436 E. Section Center St.	Covina	CA	91722	IP	LA	1.38	1.38				X						X					
408	Bird of Paradise Nursery	Rogelio Garhlo	IP	4112 Paramount Blvd.	Pico Rivera	DWP	Paramount Blvd & Isora St.	Pico Rivera	CA	90660	IP	LA	0.88	0.88										X					
409	Andres Ramirez Mendoza	Juan Ramirez	IP	14715 S. Vermont Ave.	Gardena	DWP	898 E. Deloras Dr.	Carson	CA	90745	IP	IP	3.01	3.01										X					
410	California Nurseries	Jose Gutierrez	IP	18924 Roscoe Blvd.	Northridge	DWP	P.O. Box 2778	North Hills	CA	91393	GO	LA	2.19	2.19										X					
411	Gerardo F. Ramirez Nursery	Gerardo Ramirez	IP	12806 Rose Dr.	Whittier	DWP	12806 Rose Dr.	Whittier	CA	90601	IP	IP	0.82	0.82										X					
412	Jauregui Nursery, LLC	Filiberto Jauregui	IP	7198 E. Atherton	Long Beach	DWP	4185 Paseo de Oro	Cypress	CA	90630	GO	D	32.25	32.25										X					
413	Javier Hernandez Nursery	Javier Hernandez	IP			DWP	337 E. 237th St.	Carson	CA	90745	IP	D	2.64	2.64									X						
414	V & N Nursery	Jose Uribe	IP	Hart St. & Van Owen St.	Reseda	DWP	10953 Lindblade St. 3948 Sepulveda Blvd.	Culver City	CA	90232	GO	LA	2.05	2.05				X						X					
415	H. Cardenas & S. Montoya	Cardenas/Salvador Montoya	IP	9555 Spruce St.	Pico Rivera	DWP	IP	IP	CA	90660	IP	IP	0.33	0.33				X						X					
416	Clifford Sussman Nursery	Clifford Sussman	IP	Foothill Blvd & N. Iglesia St.	San Dimas	DWP	IP	IP	CA	IP	IP	IP	1.73	1.73				X						X					
417	Marcela Rodriguez Nursery	Marcela Rodriguez	IP	599 W. 135th St.	Los Angeles	DWP	IP	IP	CA	IP	IP	IP	2.93	2.93				X						X					
418	Marcela Rodriguez Nursery	Marcela Rodriguez	IP	90th St. & Miner St.	Los Angeles	DWP	IP	IP	CA	IP	IP	IP	1.59	1.59				X						X					
419	Marcela Rodriguez Nursery	Marcela Rodriguez	IP	Alameda St. & 90th St.	Los Angeles	DWP	IP	IP	CA	IP	IP	IP	2.91	2.91				X						X					
420	Marcela Rodriguez Nursery	Marcela Rodriguez	IP	San Fernando Rd. & Roxford St.	Los Angeles	DWP	IP	IP	CA	IP	IP	IP	5.24	5.24				X						X					
421	Juan R. Ramirez Nursery	Juan R. Ramirez	IP	Morella & Stagg St.	North Hollywood	DWP	IP	IP	CA	IP	IP	IP	1.68	1.68				X											
422	Juan Ramirez Nursery	Juan Ramirez	IP	Radford Ave. & Arminta St.	North Hollywood	DWP	IP	IP	CA	IP	IP	IP	1.68	1.68				X											
424	Felipe Serrano	Felipe Serrano	IP	Ashworth St. & Clark Ave	Lakewood	DWP	IP	IP	CA	IP	IP	IP	0.61	0.61				X											
425	Ramon Ramirez Nursery	Ramon Ramirez	IP	Figueroa St. & 152nd St.	Los Angeles	DWP	IP	IP	CA	IP	IP	IP	1.41	1.41				X						X					
426	Ramon Ramirez Nursery	Ramon Ramirez	IP	Amelia Ave. & Lindsay Way	Glendora	DWP	IP	IP	CA	IP	IP	IP	2.6	2.6				X						X					
427	R & A Nursery	Julia Arrolla Garrido	IP	Bellflower Blvd. & Ashworth St.	Lakewood	DWP	IP	IP	CA	IP	IP	IP	3	3				X						X					
432	Cosentino's	John Cosentino	953843217	25019 Pacific Coast Highway	Malibu		PO Box 945	Malibu	CA	90261	IP	IP	1.5	0.75	X														
438	Mi Jalisco Nursery	Oscar Hernandez	IP	5760 Ashworth St.	Lakewood		PO Box 1237	Lakewood	CA	90713	IP	SG	3.00	2.00	X	X	X							X					

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL			MAILING				CROP TYPE	Watershed	ACREAGE		PAPERWORK			EDUCATION			GROUP DUES		
			APN	ADDRESS	CITY	DWP	ADDRESS	CITY	STATE			TOTAL	IRRIGATED	Info	General Q	BMP Q	2018	2019	2020	2021	2022	2018

TOTALS

198												1246.63	798.11	107.00	74.00	91.00	40.00						139.00
														54.0%	37.4%	46.0%	20.2%						70.2%
IP	In Progress - still gathering information													464.13	334.77	422.28	208.92						409.35

Watersheds:

D Dominguez Channel LA/Long Beach Harbors WMA
 LA Los Angeles River Watershed
 SC Santa Clara River Watershed
 SG San Gabriel River Watershed
 SM Santa Monica WMA
 SA Santa Anna River Watershed (Located in the Santa Ana Region)
 IP In Progress

# Operations	Irrigated Acres	Crop Type:	# Operations	Irrigated Acres
40	133.48	F Cutflower	2	4.25
83	325.88	GO Ornamental	74	307.04
5	83.75	C Color Plants	4	26.64
27	127.92	V Vineyard	18	111.21
10	23.5	GH Greenhouse	2	2.25
0	0	O Orchard	2	18.5
33	103.58	S Sod	0	0
		M Multiple	3	41.75
		R Row Crop	5	53.8
		IP In Progress	88	232.67

198 798.11

198 798.11

Closed or Out of Business

NGA #	OWNER/ TENANT	OPERATOR/ CONTACT	PARCEL			MAILING				CROP TYPE	Watershed	ACREAGE		Comments
			APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP			TOTAL	IRRIGATED	
14	Acosta Growers Inc.	Eddie Acosta / Carlos Acosta	5283007271	2657 Delta Ave	Rosemead	18012 E. Alford St.	Azusa	CA	91702	General Ornamental	LA	1.5	1.13	NOT-Lot Not Released by owner
15	Acosta Growers Inc.	Eddie Acosta / Carlos Acosta	5283017270 5283017271 5283017271	2450 Charlotte Ave	Rosemead	18012 E. Alford St.	Azusa	CA	91702	General Ornamental	LA	2.5	1.88	NOT-Lot Not Released by owner
90	Kobata Growers, Inc.	Jack Mayesh	7336004277 7336004276	20300 Figueroa Street	Carson	17622 Van Ness	Torrance	CA	90504	Color	D	3	2.5	NOT on file
137	Pacific Nursery	Sharon/Glenn Tachibana	6114001007	14504 S Normandie Ave	Gardena	14504 S. Normandie Ave.	Gardena	CA	90247	General Ornamental	D	4.5	3	NOT-out of business
150	Colorama Wholesale Nursery	Richard Wilson	8617001029	1025 N. Todd Ave.	Azusa	1025 N Todd Avenue	Azusa	CA	91702	C	SG	26	15.3	Closed permanently; moved out of county
162	San Gabriel Nursery & Florist	Fred Yoshimura/ Mary Swanton	5276018003	2015 Potrero Grande	Monterey Park	632 South San Gabriel Blvd.	San Gabriel	CA	91776	GO	LA	10	6	NOT
165	Sempervirens Botanical Company	John Low	5373028022 4091025800	3237 West 178th Street	Torrance	3237 West 178th Street	Torrance	CA	90504	General Ornamental	D	2	1.5	John Left his parcel and is now on parcel with NGA #134
189	West Covina Wholesale Nursery	Dave Zylstra	8391003911	3425 Damien Ave	La Verne	P. O. Box 8046	La Verne	CA	91750	General Ornamental	SG	1.5	1.25	Location Closed-NOT in process
223	Nijjar Vineyard	Sanjeet Nijjar	8527004025	29 Starlite Drive	Bradbury	29 Starlite Drive	Bradbury	CA	91010	Vineyard	LA	0.9	0.5	NOT
224	Schoelkopf Vineyard	Juergen Schoelkopf	4470009058	31499 Pacific Coast Hwy	Malibu	31499 Pacific Coast Highway	Malibu	CA	90265	V	LA	1	0.8	Exempt by WB
243	Chartwell Estate Vineyard	Scott Rich Jim Burrows	4362016008	750 Bel Air Rd	Los Angeles	750 Bel Air Rd	Los Angeles	CA	90077	V	SM	1.5	1	Exempt by WB August 2018
249	Hotchkis Vineyard	Frances Lacey	4369028005	10939 Chalon Rd	Los Angeles	10939 Chalon Rd	Los Angeles	CA	90077	V	SM	1.7	0.4	NOT
252	Kolawa Properties, LLC	Adam Kolawa	8527007032	673 Deodar Ln	Bradbury	101 E. Huntington Dr., 2nd Floor	Monrovia	CA	91016	Vineyard	SG	4	1	NOT
254	Manassero Farms	Dan Manassero	7016007906	North East corner of 166th & Studebaker Rd.	Cerritos	9925 Via La Granja	Yorba Linda	CA	92886	R	SG	4	3	NOT Aug 2018
261	ABC Rhubarb Farms	Sonia Chavez	6230022800	6208 Clara St	Bell Gardens	PO Box 39145	Downey	CA	90239	Row Crop	LA	5.83	5	NOT, No longer in growing in LA County
262	The Orchid Garden	James Weiss	4088019802 4088019803	3511 W. 182nd St.	Torrance	2506 Ardmore Ave.	Hermosa Beach	CA	90254	General Ornamental	D	1.25	0.2	NOT in process
273	Pierce College	Paul Nieman	2149007902	6201 Winnetka Ave	Woodland Hills	6201 Winnetka Ave	Woodland Hills	CA	91371	M	LA	430	200	
291	MB Landscaping and Nursery	Maria Martinez	7339017014	19202 Main St.	Carson	20300 S. Figueroa St.	Carson	CA	90745	General Ornamental	D	6	1.5	NOT Yard Not Released
336	Cal-Tokyo Landscape Co.	Yoshiharu Kariya	Pending Questionnaire Responses	5531 Leeds St.	South Gate	15428 Cornuta Ave.	Bellflower	CA	90706	Pending Questionnaire Responses	LA	1.99	1.99	NOT in process
404	San Gabriel Nursery & Florist	Fred Yoshimura / Mary Swanton	IP	700-800 S. San Gabriel Blvd.	San Gabriel	632 South San Gabriel Blvd.	San Gabriel	CA	91776	IP	IP	6.25	4.13	NOT in process
	Grand Vista Geranium Gardens	Henry Andrade	IP			18307 S. Central Ave.	Carson	CA	90746					Producing but not enrolled

APPENDIX B

TABULATED DATA, CURRENT AND HISTORICAL SAMPLING RESULTS

LIST OF SITE VISITS AND COLLECTED SAMPLES
NURSERY GROWERS ASSOCIATION
LOS ANGELES COUNTY IRRIGATED LANDS GROUP

OWNER/TENANT	NGA #	PROPERTY ADDRESS	ACREAGE (Irrigated)	CWIL Order # R4-2005-0080								CWIL Order # R4-2010-0186								CONTINUATION, CWIL				CWIL Order # R4-2016-0143																							
				YEAR 1 ¹				YEAR 2 ²				YEAR 3		YEAR 4		Interim Sampling Event ³	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5		YEAR 1, Interim Locations				YEAR 2, Interim Locations				YEAR 3, Interim Locations				
				Dry Season	Event #1	Event #2	Event #1	Event #2	Dry Season	Event #1	Event #2	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2	Dry Season	Event #1	Event #2				
Boethling TreeLand Farms, Inc.	19	2347 Long Valley Road, Woodland Hills	14.68	8/13/07	9/25/07	12/18/07	1/5/08	8/12/08	9/23/08	11/26/08	12/15/08	10/12/09	ns*	8/19/10	ns*	3/23/11	10/11/11						2/28/14			10/7/14			9/30/15			9/2/16		1/20/17		10/6/17		3/2/18	9/13/18								
Norman's Nay-Broadway	124/125	8550 E Broadway, San Gabriel	7.00	8/13/07	9/24/07	12/7/07	1/5/08	8/12/08	9/24/08	11/26/08	12/15/08	10/12/09	ns*	8/18/10	ns*	3/21/11	10/11/11						2/28/14			10/7/14			9/30/15			9/20/16		1/20/17	2/17/17	9/28/17	1/9/18	9/18/18									
Ultra Greens	178	13102 Macay Street, Sylmar	8.50	Site not included as a sampling location.				11/26/08				10/12/09	ns*	8/17/10	ns*	10/11/11							2/28/14			10/7/14			9/30/15			9/20/16		2/17/17	9/28/17	1/9/18	9/18/18										
Valley Sod Farms, Inc.	184	16405 Chase Street, North Hills	36.00	Site not included as a sampling location.				11/26/08				10/12/09	ns*	8/17/10	ns*	10/11/11							2/28/14			10/7/14			9/30/15			9/28/17		1/9/18	9/18/18												
Acosta Growers Inc.	11	669 S. Azusa Ave., Azusa	7.50	Site not included as a sampling location.				Rotating Site				8/28/12											nv			12/2/14			10/2/15																		
M Doward-Rainbow Garden Nursery	110	1132 S. Grand Avenue, Glendora	3.75	8/8/07	9/25/07	1/4/08	ns*	8/12/08	9/23/08	11/26/08	12/15/08	10/11/09	ns*	8/18/10	ns*	10/12/11							2/28/12			12/2/14			10/2/15																		
R Wilson-Colorama Wholesale Nursery	150	1025 N. Todd Avenue, Azusa	15.30	8/8/07	9/25/07	12/7/07	ns*	8/12/08	9/23/08	11/26/08	12/15/08	10/12/09	ns*	8/18/10	ns*	3/21/11		10/12/11					2/28/12			12/2/14			10/2/15			9/20/16		2/17/17	9/28/17	Site no longer in Operation											
West Covina Wholesale-Damien	189	3424 Damien Ave, La Verne	1.25	8/8/07	9/25/07	1/4/08	ns*	8/12/08	9/23/08	11/26/08	12/15/08	10/12/09	ns*	8/18/10	ns*	10/12/11							2/28/12			12/2/14			10/2/15																		
Coiner Nursery	31	285 San Fidel, La Puente	48.00	8/21/07	9/28/07	m ⁴	ns*	8/12/08	9/23/08	11/26/08	12/15/08	10/12/09	ns*	8/18/10	ns*	3/17/12							9/26/12			10/10/13	2/28/14 ³						5/15/15		1/15/16												
H&H Nursery of Lakewood	64	6220 Lakewood Boulevard, Lakewood	2.50	8/21/07	9/28/07	1/23/08	ns*	8/12/08	9/25/08	11/26/08	12/15/08	10/13/09	ns*	8/17/10	ns*	3/17/12							9/26/12			10/10/13						5/15/15		1/15/16			3/22/18	9/13/18									
Clement's Nursery and Landscaping	81	6850 Paramount Blvd., Long Beach	3.00	Site not included as a sampling location.				11/26/08				10/10/13																																			
SY Nursery Inc.	168	19900 S Pioneer Blvd, Cerritos	4.75	8/13/07	9/28/07	11/30/07	1/25/08	8/12/08	9/24/08	11/26/08	12/15/08	10/13/09	ns*	8/17/10	ns*	3/17/12							9/26/12			10/10/13						5/15/15		1/15/16			9/2/16	1/20/17	10/6/17	3/2/18	9/13/18						
ABC Nursery, Inc.	4	424 E. Gardena Boulevard, Gardena	11.51	8/9/07	9/24/07	12/7/07	1/23/08	8/13/08	9/24/08	11/26/08	12/15/08	10/12/09	ns*	8/17/10	ns*	3/21/11						2/25/12			10/11/13						10/8/14						nv	9/2/16	1/20/17			10/6/17	3/2/18	9/13/18			
G Hernandez-New Westgrowers	53	1601 S. Santa Fe Ave, Compton	1.70	8/9/07	9/24/07	12/18/07	1/23/08	8/12/08	9/24/08	11/26/08	12/15/08	10/13/09	ns*	8/17/10	ns*	3/25/12							9/26/12			10/8/14						10/8/14						nv									
F-Y Nursery	176	Between Paulina/Prospect, Redondo Beach	7.50	8/9/07	9/24/07	12/18/07	ns*	8/13/08	9/24/08	11/26/08	12/15/08	10/13/09	ns*	8/17/10	ns*	3/25/12							9/26/12			10/8/14						10/8/14						nv		9/2/16	1/20/17			10/6/17	3/22/18	9/13/18	
Church Estate Vineyard	210	6415 Busch Drive, Malibu	2.75	Site not included as a sampling location.				11/26/08				10/13/09	ns*	8/19/10	ns*	3/25/12							9/26/12			10/11/13						10/8/14						5/15/15		1/15/16			9/2/16	1/20/17	10/6/17	3/2/18	9/13/18
Canyon Way Nursery	26	11745 Sherman Way, Studio City	4.25	Site not included as a sampling location.																																											

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 2 INTERIM
GENERAL CHEMISTRY
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	General Chemistry												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #124	LAILG-NGA-124-9	1/9/18	4.1	44	1.900	1.0	270	2.0	840	1.8	3.0	150	327	131	0.059
NGA #178	LAILG-NGA-178-4	1/9/18	0.48	87	2.400	3.9	100	2.4	520	2.4	5.6	930	172	69	0.073
NGA #184	LAILG-NGA-184-4	1/9/18	7.4	23	1.500	1.3	61	1.7	240	1.5	10	230	104	41.8	0.110
NGA #202	LAILG-NGA-202-2	1/9/18	0.23	30	1.800	7.2	60	1.8	310	1.8	2.2	61	99.2	39.7	0.037
NGA #4	LAILG-NGA-4-9	3/22/18	0.32	2.4	0.250	0.58	2.5	0.22	42	0.25	0.44	82	13.5	5.42	0.022
NGA #19	LAILG-NGA-19-9	3/22/18	0.53	140	0.480	93	150	0.54	1,400	0.48	3.3	760	434	174	0.060
NGA #64	LAILG-NGA-64-5	3/22/18	0.37	3.3	0.260	1.4	5.8	0.26	92	0.26	0.64	110	29.1	11.7	0.013
NGA #168	LAILG-NGA-168-9	3/22/18	0.14	32	0.450	10	200	0.52	470	0.45	0.69	35	155	62.0	0.027
CWIL Limits			See Table 7												
MRL			0.10	0.50	0.0020	0.11	2.0	0.010	10.0	0.0020	0.010	5	0.250	0.100	0.00050

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Officer.

CWIL Conditional waiver for irrigated lands

**

The recommended holding time for filtering is only 15 minutes. The sample was filtered as soon as possible but was filtered past holding time. However, the sample was analyzed within holding time.

EB Estimated concentration, constituent detected at greater than 10% in equipment blank

MRL

Method Reporting Limit

FD Estimated concentration, Field Duplicate RPD >25%.

*

Due to the high concentration of analyte inherent in the sample, sample was diluted prior to analysis. The MDL and MRL were raised due to this dilution.

FB Estimated concentration, constituent detected at greater than 10% in field blank

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 1
GENERAL CHEMISTRY
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	General Chemistry												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #4	LAILG-NGA4-5	3/21/11	0.69	10	0.31 ^{EB}	1.5	8.3	0.52	110	0.31 ^{EB}	2.6	810	62	25	0.230
NGA #124	LAILG-NGA124-6	3/21/11	0.36	9.7	1.8 ^{EB}	6.7	24	1.8	240	1.8 ^{EB}	2.7	620 ^{FD}	61	24	0.045
NGA # 150	LAILG-NGA 150-5	3/21/11	3.7	28	12 ^{EB}	120	60 ^{MS-02}	32	1,200	12 ^{EB}	32	110	300	120	0.031
NGA #19	LAILG-NGA19-6	3/23/11	0.54 ^{MS-01}	110	0.86 ^{EB,MS-01}	55	250	1.1	1,200	0.86 ^{EB,MS-02}	3.4	550	440	180	0.090
Duplicate	LAILG-NGA-DUP	3/21/11	0.35	9.7	1.7 ^{EB}	6.6	24	1.8	220	1.7 ^{EB}	2.3	82	57	23	0.035
Equip Blank	LAILG-NGA-EB	3/21/11	nd	nd	2.0	nd	nd	nd	nd	2.0	nd	nd	0.37	0.15	0.0028
Field Blank	LAILG-NGA- FB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	LAILG-NGA168-6	3/17/12	0.89	82	1.1 ^{O9}	35	470	1.7	1,100	1.1 ^{O9}	8.4	1200	500	200	0.110
NGA #31	LAILG-NGA31-4	3/17/12	1.1	55	1.0 ^{O9}	12	160	0.90	520	1.0 ^{O9}	2.0	81	240	95	0.027
NGA #162	LAILG-NGA162-1	3/17/12	0.16	35	0.96 ^{O9}	5.9	120	0.95	350	0.96 ^{O9}	1.0	5	140	57	0.014
NGA #64	LAILG-NGA64-3	3/17/12	0.79 ^{FD}	5.8	0.28 ^{O9}	0.70 ^{FD}	8.4	0.32	57	0.28 ^{O9}	1.5 ^{FD}	500 ^{FD}	51	21	0.047
Duplicate	LAILG-NGA-DUP	3/17/12	0.60	5.4	0.25 ^{O9}	1.3	8.6	0.27	46	0.25 ^{O9}	1.1	380	44	18	0.049
Equip Blank	LAILG-NGA-EB	3/17/12	nd	nd	nd ^{O9}	nd	nd	nd	nd	nd ^{O9}	nd	nd	nd	nd	0.00073
Field Blank	LAILG-NGA- FB	3/17/12	nd	nd	nd ^{O9}	nd	nd	nd	nd	nd ^{O9}	nd	nd	nd	nd	0.00050
NGA #4	LAILG-NGA4-6	3/25/12	na*	69	1.1	17	52	1.0	320	1.1	1.4	34 ^{FD}	100 ^{FD}	42 ^{FD}	0.051
NGA #170	LAILG-NGA170-1	3/25/12	0.31	18	0.65	1.6	14	0.60	130	0.65	0.86	100	61	24	0.030
NGA #176	LAILG-NGA176-2	3/25/12	0.30	29	0.99	8.7	43	0.99	220	0.99	2.2	550	80	32	0.066
NGA #210	LAILG-NGA210-2	3/25/12	0.20	110	1.4	0.57	250	1.3	700	1.4	2.8 ^{MS-02}	86	270	110	0.0060
Duplicate	LAILG-NGA-DUP	3/25/12	2.2 ^p	55	1.1	17	44	1.1	290	1.1	1.3	21	61	25	0.051
Equip Blank	LAILG-NGA-EB	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Field Blank	LAILG-NGA- FB	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CWIL Limits			See Table 7												
MDL			0.048	0.10	0.00022	0.020	0.10	0.0014	4.0	0.00022	0.0014	5	0.039	0.016	0.00027
RL			0.10	0.50	0.002	0.11	0.50	0.010	10	0.002	0.010	5	0.25	0.10	0.00050

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Officer.

CWIL Conditional waiver for irrigated lands

O9 This sample was received with the EPA recommended holding time expired.

EB Estimated concentration, constituent detected at greater than 10% in equipment blank

MS-01 The spike recovery for this QC sample is outside of the established control limits possibly due to matrix interference.

FD Estimated concentration. Field Duplicate RPD >25%.

MS-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

FB Estimated concentration, constituent detected at greater than 10% in field blank

na* Ammonia not analyzed due to sample collection via peristaltic pump

p Estimated concentration due to sample collection via peristaltic pump

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 3
GENERAL CHEMISTRY
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	General Chemistry												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #19	LAILG-NGA19-7	2/28/14	1.4	120	2.400**	53	160	2.8	1,000	2.4**	4.7	650 ^{FD}	319	128	0.056
NGA #26	LAILG-NGA26-1	2/28/14	2.4	73	1.800**	6.4	180	2.1	590	1.8**	2.3	49	158	63.2	0.056
NGA #124	LAILG-NGA124-7	2/28/14	4.5	21	1.200**	13	100	1.5	420	1.2**	2.2	160	125	50.2	0.049
NGA #178	LAILG-NGA178-2	2/28/14	0.87	120	2.200**	10	370	2.4	940	2.2**	3.6	270	324	130	0.030
NGA #184	LAILG-NGA184-3	2/28/14	0.23	2.5	0.330**	0.40	1.6	0.44	41	0.33**	0.72	160	13.8	5.54	0.0079
Duplicate	LAILG-NGA-DUP	2/28/14	1.4	120	2.800**	51	170	3.1	1100	2.8**	5.4	470 ^{FD}	320	128	0.057
Equip Blank	LAILG-NGA-EB	2/28/14	<0.10	<0.50	<0.0020	<0.11	<0.50	<0.010	<10	<0.0020	<0.10	<5	<0.250	<0.100	<0.00050
Field Blank	LAILG-NGA- FB	2/28/14	<0.10	<0.50	<0.0020	<0.11	<0.50	<0.010	<10	<0.0020	<0.10	<5	<0.250	<0.100	<0.00050
CWIL Limits			See Table 7												
MRL			0.10	0.50	0.0020	0.11	0.50	0.010	10.0	0.0020	0.10	5	0.250	0.100	0.00050

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Officer.

CWIL Conditional waiver for irrigated lands

**

The recommended holding time for filtering is only 15 minutes. The sample was filtered as soon as possible but was filtered past holding time. However, the sample was analyzed within holding time.

EB Estimated concentration, constituent detected at greater than 10% in equipment blank

MRL

Method Reporting Limit

FD Estimated concentration. Field Duplicate RPD >25%.

FB Estimated concentration, constituent detected at greater than 10% in field blank

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 4
GENERAL CHEMISTRY
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	General Chemistry												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #150	LAILG-NGA-150-6	12/2/14	0.41	60	2.4**	13	130	2.6	530	2.5**	3.7	240	179	71.8	0.095
NGA #188	LAILG-NGA-188-1	12/2/14	0.31	38	0.56**	4.4	110	0.80	330	0.56**	2.0 ^{FD}	2000 ^{FD}	141	56.3	0.036
Duplicate	LAILG-NGA-DUP	12/2/14	0.27	35	0.58**	4.4	92	0.64	290	0.60**	1.4	430	126	50.6	0.031
NGA #168	LAILG-NGA-168-7	5/15/15	0.18	57	0.36**	11	120	0.44	400	0.36**	0.74	91	134	53.7	0.036
Equip Blank	LAILG-NGA-EB	12/2/14	<0.10	2.0	<0.0020**	<0.100	<0.50	<0.010	10	<0.0020**	<0.010	<5	1.64	0.656	0.0011
Field Blank	LAILG-NGA- FB	12/2/14	<0.10	<0.50	<0.0020**	<0.100	<0.50	<0.010	<10.0	<0.0020**	<0.010	<5	<0.250	<0.100	<0.00050
CWIL Limits			See Table 7												
MRL			0.10	0.50	0.0020	0.100	0.50	0.010	10.0	0.0020	0.010	5	0.250	0.100	0.00050

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Officer.

CWIL Conditional waiver for irrigated lands

EB Estimated concentration, constituent detected at greater than 10% in equipment blank

FD Estimated concentration. Field Duplicate RPD >25%.

FB Estimated concentration, constituent detected at greater than 10% in field blank

**

The recommended holding time for filtering is only 15 minutes. The sample was filtered as soon as possible but was filtered past holding time. However, the sample was analyzed within holding time.

MRL Method Reporting Limit

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 5 CONTINUATION
GENERAL CHEMISTRY
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	General Chemistry												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #64	LAILG-NGA-64-4	1/5/16	0.63	3.9	0.15**	0.70	7.2	0.17	45	0.16**	0.5	190	28.3	11.3	0.027
NGA #168	LAILG-NGA-168-8	1/5/16	0.36	41	0.32**	15	160	0.45	410	0.32**	0.80	140	162	64.9	0.036
Duplicate	LAILG-NGA-DUP	1/5/16	0.36	39	0.35**	15	160	0.5	410	0.35**	0.91	160	159	63.6	0.041
Equip Blank	LAILG-NGA-EB	1/5/16	<0.10	<0.50	<0.0020**	<0.100	<0.50	<0.010	<10.0	<0.0020**	<0.010	<5	<0.250	<0.100	<0.00050
Field Blank	LAILG-NGA-FB	1/5/16	<0.10	<0.50	<0.0020**	<0.100	<0.50	<0.010	<10.0	<0.0020**	<0.010	<5	<0.250	<0.100	<0.00050
CWIL Limits			See Table 7												
MRL			0.10	0.50	0.0020	0.100	0.50	0.010	10.0	0.0020	0.010	5	0.250	0.100	0.00050

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Officer.

CWIL Conditional waiver for irrigated lands ** The recommended holding time for filtering is only 15 minutes. The sample was filtered as soon as possible but was filtered past holding time.
 EB Estimated concentration, constituent detected at greater than 10% in equipment blank
 FD Estimated concentration. Field Duplicate RPD >25%. MRL Method Reporting Limit
 FB Estimated concentration, constituent detected at greater than 10% in field blank

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 1 INTERIM
GENERAL CHEMISTRY
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	General Chemistry												
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO ₃	Ca	Cu
NGA #4	LAILG-NGA-4-8	1/20/17	0.33	3.3	0.082**	0.76	2.4	0.080	46	0.082**	0.12	15	7.58	3.04	0.0045
NGA #19	LAILG-NGA-19-8	1/20/17	0.31	42 ^{FD}	0.78**	25 ^{FD}	61 ^{FD}	0.82	700 ^{FD}	0.78**	2.7 ^{FD}	430 ^{FD}	163	65.2	0.047 ^{FD}
NGA #176	LAILG-NGA-176-3	1/20/17	<0.10	3.9	0.28**	0.70	3.6	0.32	97	0.28**	0.70	360	13.4	5.38	0.029
Duplicate	LAILG-NGA-DUP	1/20/17	0.33	27	0.86**	15	42	0.85	400	0.86**	5.2	1000	180	72.2	0.095
NGA #124	LAILG-NGA-124-8	2/17/17	0.50	7.6	0.77**	3.8	70	0.73*	270	0.76**	3.9	740	120	48.1	0.120
NGA #150	LAILG-NGA-150-7	2/17/17	1.4	10	3.3**	11	54	3.3*	300	3.3**	4.0	180	73.8	29.6	0.057
NGA #158	LAILG-NGA-158-1	2/17/17	0.18	1.9	0.19**	0.55	20	0.29	38	0.19**	0.60	110	29.5	11.8	0.039
NGA #178	LAILG-NGA-178-3	2/17/17	0.58	74	1.3**	0.55	200	1.3*	720	1.3**	13*	2900	431	173	0.37
NGA #202	LAILG-NGA- 202-1	2/17/17	0.11	6.5	0.45**	1.8	18	0.47*	140	0.46**	0.81	130	39.7	15.9	0.038
CWIL Limits			See Table 7												
MRL			0.10	0.50	0.0020	0.100	0.50	0.010	10.0	0.0020	0.010	5	0.250	0.100	0.00050

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated by the QA Officer.

CWIL	Conditional waiver for irrigated lands	**	The recommended holding time for filtering is only 15 minutes. The sample was filtered as soon as possible but was filtered past holding time.
EB	Estimated concentration, constituent detected at greater than 10% in equipment blank		However, the sample was analyzed within holding time.
FD	Estimated concentration. Field Duplicate RPD >25%.	MRL	Method Reporting Limit
FB	Estimated concentration, constituent detected at greater than 10% in field blank	*	Due to the high concentration of analyte inherent in the sample, sample was diluted prior to analysis. The MDL and MRL were raised due to this dilution.

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
GENERAL CHEMISTRY
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	General Chemistry									
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS
NGA #130	NGA-#130-LAILG-1	8/6/07	2.5	58.34	2,2457	50.44	43.04	2.29	1,170	2.05	2,305	6.3
NGA #183	NGA-#183-LAILG-1	8/6/07	0.04 ^J	209.97	0.2336	0.13	177.83	0.23	223	0.23	0.264	11
NGA #19	NGA-#19-LAILG-1	8/13/07	1	108.57	2,2882	10.84	118.85	2.68	772	4.62	5.09	568
NGA #124	NGA-#124-LAILG-1	8/13/07	9.8	69.23	3,5006	72.48	206.25	4.31	1,002	3.96	4,627	99.5
NGA #168	NGA-#168-LAILG-1	8/13/07	0.4	81.85	1,977	4.93	131.16	2.28	664	2.13	3,243	122
NGA BLANK	NGA LAILG-BLANK-	8/13/07	0.04 ^J	nd	nd	nd	nd	nd	32	nd	nd	nd
NGA FBLLI	NGA-LAILG-FBLLI	8/21/07	0.01 ^J	nd	nd	0.016 ^J	nd	nd	nd	nd	nd	nd
NGA EQBLLI	NGA-LAILG-EQBLLI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA-#150-LAILG	9/25/07	52.4	95.9	26.84	355.6	87	22.5	2279	23	24	57
NGA #183	ILG-#183	9/26/07	13.5 ^B	51.63	1,4457 ^B	11.35^B	57.38 ^B	1.64 ^B	317 ^B	2.24 ^B	0.858 ^B	28.7 ^B
GA #183-DU	ILGNGA-#Dup	9/26/07	29 ^B	55.3	4,193 ^B	26.77^B	89.17 ^B	4.29 ^B	434 ^B	5.66 ^B	4,488 ^B	20 ^B
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	5	nd	nd	nd
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168-2	ILGNGA-#168-2	9/28/07	2.2	172.52	1,582 ^C	8.91	340.14 ^E	2.15	1,297	3.51	5,379	504
NGA #168	NGA-#168-LAILG-3	11/30/07	0.48	101.43	2,1635	30.81	245.04 ^E	2.67	951	3.13	3,548	nd
NGA #182	NGA #182-LAILG-1	12/7/07	0.4	60.71	1,7533	19.85	159.87^F	1.52	456	1.41	1,554	20.3
GA #182-DU	NGA-Duplicate	12/7/07	0.42	59.2	1,8269	19.71	118.48 ^F	1.51	552	1.56	1,523	20.7
NGA #4	NGA #4-LAILG-1	12/7/07	0.48	20.64	1,1355	4.03	20.39 ^F	0.8	186	0.77	0.829	58
NGA #130	NGA #130-LAILG-2	12/7/07	0.3	162.95	1,0247	26.16	190 ^F	0.91	830	0.74	0.94	51
NGA #150	NGA #150-LAILG-2	12/7/07	2.9	27.34	14,0243	80.89	56.59 ^F	9.43	780	8.89	9,445	40
NGA #124	NGA-#124-LAILG-2	12/7/07	4.6	33.03	3,9247	45.41	59.24 ^F	2.9	550	2.76	3,168	90
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	1.13	nd	nd	nd	nd	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	6	nd	nd	nd
NGA #176	NGA-#176-LAILG-1	12/18/07	5.5	56.82	0.7145	3.85	293.12	0.54	680	12.21	3,447	6,168
NGA #183	LAILG-NGA#183-3	12/18/07	1.95	28.41	2,344	11.37	41.11	2.78	292	3.14	3,561	92
NGA #19	LAILG-NGA#19-2	12/18/07	1.4	162.66	11,2352	86.7	290.99	2.13	1,292	4.01	5,544	684
NGA #13	LAILG-NGA#13-1	12/18/07	1.6	5.46	0.2033	1.72	32.27	0.49	32	1.44	2,878	944
NGA #53	LAILG-NGA#53-1	12/18/07	0.7	4.72	0.2973	0.49	12.51	0.57	132	0.75	1,188	124
CWIL Limits			See Table X									
MDL			0.01	0.01	0.0075	0.01	0.01	0.016	0.1	0.01	0.016	0.5
RL			0.05	0.05	0.01	0.05	0.05	0.05	5	0.01	0.05	5

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference

- CWIL Conditional waiver for irrigated lands
B Estimated concentration, since RPD of duplicate is >25%
C Procedural blank Matrix Spike recovery out of limits
E ESTIMATED CONCENTRATION, matrix spike does not meet acceptance criteria
F Sulfate detected in lab blank, at 1.09 mg/L
J Estimated concentrations, results above MDL but less than RL

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
GENERAL CHEMISTRY
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	General Chemistry									
			Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS
NGA #110	LAILG-NGA110-1	1/4/08	0.41	10.65	1.3052	2.36	18.22	1.74	162	1.81	2.033	24
NGA #189	LAILG-NGA189-1	1/4/08	0.59	7.29	0.6851	1.83	26.43	1.33	192	1.8	2.475	20
NGA #19	LAILG-NGA19-3	1/5/08	0.12	157.52	0.2125	0.44	451.78	0.96	1,030	1.26	1.173	84
NGA #124	LAILG-NGA124-3	1/5/08	15.5	28.3	0.9814	28.34^{Q1}	57.68	1.66	378	1.66	2.228	40
NGA #183	LAILG-NGA183-4	1/5/08	0.73	5.82	1.0874	1.4	6.36	0.23	106	1.29	1.729	510
NGA #4	LAILG-NGA4-2	1/23/08	0.24	1.45	0.1891	0.6	3.87	0.15	145	0.26	1.848	27
NGA #53	LAILG-NGA53-2	1/23/08	0.31	2.19	0.6425	0.76	14.92	0.82	nd	0.68	1.993	516
NGA #64	LAILG-NGA64-1	1/23/08	0.20	3.82	0.2818	3.83	101.1	0.3	nd	0.46	0.393	76
NGA #130	LAILG-NGA130-3	1/24/08	0.15	58.12	0.264	3.64	107.65	0.26	383	0.27	0.314	16
NGA #182	LAILG-NGA182-2	1/24/08	0.17 ^{M4}	7.39	0.6085	1.91 ^{M4}	14.22	0.76	218	0.81	0.825	64
NGA #168	LAILG-NGA168-4	1/25/08	0.38	65.9	3.053	14.58	117.44	3.07	592	5.45	2.363	1126.7
NGA #19	LAILG-NGA 19-4	8/12/08	0.03 ^{FB}	104.03	1.1877	12.65	107.33	1.75	834	1.86	15.494	213
NGA #4	LAILG-NGA 4-3	8/13/08	0.68	350.11	11.5262	200.18	219.52	69.7 ^{FD}	2,238	13.05	31.713	371 ^{FD}
Duplicate	LAILG-NGA-DUP	8/13/08	0.71	397.47	9.0404	212	252.22	34.87 ^{FD}	2,350	12	26.483	787 ^{FD}
NGA #31	LAILG-NGA 31-1	9/23/08	0.13 ^{FD}	82.13 ^{EB,FB}	1.562 ^{H,FD}	17.3	134.93	1.472 ^H	602	2.34 ^H	1.813 ^{H,FD}	162
Duplicate	LAILG-NGA-DUP	9/23/08	0.37 ^{FD}	82.37 ^{EB,FB}	2.629 ^{H,FD}	19.64	136.19 ^{M4}	1.84 ^H	626	2.10 ^H	0.883 ^{H,M3}	127
NGA #19	LAILG-NGA 19-5	11/26/08	0.96	115.72	1.507	26.94	126.35	1.356	748	4.69	4.884	995
NGA #210	LAILG-NGA 210-1	11/26/08	0.11	155.92	1.892	0.92	336.78	2.185	884	3.23	3.722	542
NGA #184	LAILG-NGA 184-1	11/26/08	0.46	31.44	0.609	3.12	17.92	0.643	206 ^{FB}	0.88	1.3	129.5
Duplicate	LAILG-NGA-DUP	11/26/08	0.48	32.51	0.616	3.1	18.68	0.65	214 ^{FB}	0.86	1.297	128
NGA #124	LAILG-NGA 124-4	11/26/08	0.48	37.78	2.595	28.36	84.22	2.975	568	2.53	3.297	117
NGA #31	LAILG-NGA 31-2	11/26/08	0.76	6.12	0.474	3.6	14.84	0.497	104 ^{FB}	1.63	1.94	353
NGA #130	LAILG-NGA 130-4	11/26/08	0.68	95.81	0.228	9.17	183.82	0.652	616	0.8	1.046	97
NGA #150	LAILG-NGA 150-3	11/26/08	32.2	65.92	31.579	114.76	258.65	49.896	2,446	37.69	48.048	45.5
NGA #25	LAILG-NGA 25-1	11/26/08	0.85	21.99	1.1712	5.31	51.95	1.338	166 ^{FB}	1.38	1.641	168.5
NGA #150	LAILG-NGA 150-4	12/15/08	15.75	47.27	26.0911	268.53	125.27^{M4}	24.935 ^{M4}	1704^{EB}	2.94	24.75 ^{M4}	333.5
NGA #124	LAILG-NGA 124-5	12/15/08	1.68	26.51	24.4087	40.43	45.28	21.115	424 ^{EB}	3.66	2.706	115.5
NGA #189	LAILG-NGA 189-2	12/15/08	0.54	31.28	0.6795	9.87	41.27	0.813	220 ^{EB}	0.99	1.261	111.3
NGA #110	LAILG-NGA 110-2	12/15/08	0.31	28.59	1.186	8.48	50.87	1.469	328 ^{EB}	1.6	1.868	93
NGA #31	LAILG-NGA 31-3	12/15/08	4.32	36.98	3.0228	12.14	57.58	2.148	364 ^{EB}	2.87	3.155	85.5
NGA #184	LAILG-NGA 184-2	12/15/08	0.64	27.46	0.7339	4.41	33.57	0.502	240 ^{EB}	2.16	2.94	1,079
NGA #130	LAILG-NGA 130-5	12/15/08	0.52	46.43	0.4392	11.81	67.8	0.481	258 ^{EB}	0.47	0.512	59.7
NGA #178	LAILG-NGA 178-1	12/15/08	0.81	85.04	2.4077	12.99	148.27	2.648	462^{EB}	2.64	2.934	72.7 ^{FD}
Duplicate	LAILG-NGA-DUP	12/15/08	0.79	102.32	2.3169	14.99	173.96	2.604	588	2.62	2.944	49.3
NGA #64	LAILG-NGA 64-2	12/15/08	1.15	12.38 ^{EB}	0.4307	5.39	35.34	0.49	232 ^{EB}	0.71	0.868	112
NGA #168	LAILG-NGA 168-5	12/15/08	0.25	53.4	1.4434	15.33	130.75	1.568	492 ^{EB}	2.24	2.386	236
NGA #4	LAILG-NGA 4-4	12/15/08	0.52	8.67 ^{EB}	1.0382	2.7	15.23	0.158	238 ^{EB}	2.33	2.231	295
CWIL Limits			See Table X									
MDL			0.01	0.01	0.0075	0.01	0.01	0.016	0	0.01	0.016	0.5
RL			0.05	0.05	0.01	0.05	0.05	0.05	5	0.01	0.05	5

Concentrations are reported in milligrams per liter (mg/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference.

CWIL	Conditional waiver for irrigated lands	M4	Spike or surrogate compound recovery was out of control due to matrix interference.
EB	Estimated concentration, constituent detected at greater than 10% in equipment blank		The associated method blank spike or surrogate compound was in control and therefore the sample data was reported without further clarification.
FD	Estimated concentration. Field Duplicate RPD >25%.		
FB	Estimated concentration, constituent detected at greater than 10% in field blank		
H	Sample received and /or analyzed past the recommended holding time.	Q1	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration.
M3	Detection of the analyte was difficult due to matrix interference.		

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 2 INTERIM
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	Dieldrin	Endosulfan-Sulfate	Endosulphan-I	Endosulfan-II
NGA #124	LAILG-NGA-124-9	1/9/18	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #178	LAILG-NGA-178-4	1/9/18	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #184	LAILG-NGA-184-4	1/9/18	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #202	LAILG-NGA-202-2	1/9/18	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #4	LAILG-NGA-4-9	3/22/18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #19	LAILG-NGA-19-9	3/22/18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #64	LAILG-NGA-64-5	3/22/18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #168	LAILG-NGA-168-9	3/22/18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
WQB			nl	0.59	nl	0.84	0.59	0.59	0.13	3.9	14	nl	19	nl	nl	0.14	110,000	110,000	110,000
MRL			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimate.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 2 INTERIM
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides											Sample Notes	
			Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Chlordane (tech)	Heptachlor	Heptachlor Epoxide	Methoxychl or	Mirex	Toxaphene	trans- Nonachlor	cis- Nonachlor		
NGA #124	LAILG-NGA-124-9	1/9/18	<1000	<50	<50	<1000	<50	<50	<50	<50	<5000	<50	<50	<50	M-04
NGA #178	LAILG-NGA-178-4	1/9/18	<2500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #184	LAILG-NGA-184-4	1/9/18	<2000	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #202	LAILG-NGA-202-2	1/9/18	2500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #4	LAILG-NGA-4-9	3/22/18	<500	<10	<10	<200	<10	<10	<10	<10	<2500	<10	<10	<10	M-04
NGA #19	LAILG-NGA-19-9	3/22/18	<500	<10	<10	<200	<10	<10	<10	<10	<2500	<10	<10	<10	M-04
NGA #64	LAILG-NGA-64-5	3/22/18	<500	<10	<10	<200	<10	<10	<10	<10	<2500	<10	<10	<10	M-04
NGA #168	LAILG-NGA-168-9	3/22/18	<500	<10	<10	<200	<10	<10	<10	<10	<2500	<10	<10	<10	M-04
WQB			nl	760	760	nl	0.21	0.1	nl	nl	0.75	nl	nl	0.59	
MRL			100	5.0	5.0	100	5.0	5.0	5.0	5.0	500	5	5.0	5.0	

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

M-04

Due to the nature of matrix interferences, sample extract was diluted prior to analysis. The MDL and MRL were raised due to the dilution.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 1 INTERIM
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	Dieldrin	Endosulfan Sulfate	Endosulphan-I	Endosulfan-II
NGA #4	LAILG-NGA-4-8	1/20/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #19	LAILG-NGA-19-8	1/20/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #176	LAILG-NGA-176-3	1/20/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Duplicate	LAILG-NGA-DUP	1/20/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #124	LAILG-NGA-124-8	2/17/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #150	LAILG-NGA-150-7	2/17/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #158	LAILG-NGA-158-1	2/17/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #178	LAILG-NGA-178-3	2/17/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #202	LAILG-NGA- 202-1	2/17/17	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
WQB			nl	0.59	nl	0.84	0.59	0.59	0.13	3.9	14	nl	19	nl	nl	0.14	110,000	110,000	110,000
MRL			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimate.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 1 INTERIM
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides											Sample Notes	
			Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Chlordane (tech)	Heptachlor	Heptachlor Epoxide	Methoxychl or	Mirex	Toxaphene	trans- Nonachlor	cis- Nonachlor		
NGA #4	LAILG-NGA-4-8	1/20/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #19	LAILG-NGA-19-8	1/20/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #176	LAILG-NGA-176-3	1/20/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
Duplicate	LAILG-NGA-DUP	1/20/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #124	LAILG-NGA-124-8	2/17/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #150	LAILG-NGA-150-7	2/17/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #158	LAILG-NGA-158-1	2/17/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #178	LAILG-NGA-178-3	2/17/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #202	LAILG-NGA- 202-1	2/17/17	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
WQB			nl	760	760	nl	0.21	0.1	nl	nl	0.75	nl	nl	0.59	
MRL			100	5.0	5.0	100	5.0	5.0	5.0	5.0	500	5	5.0	5.0	

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated.

CWIL Conditional waiver for irrigated lands
 WQB Water Quality Benchmarks
 MRL Method Reporting Limits
 nl not listed

M-04

Due to the nature of matrix interferences, sample extract was diluted prior to analysis. The MDL and MRL were raised due to the dilution.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 5 CONTINUATION
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	Dieldrin	Endosulfan-Sulfate	Endosulphan-I	Endosulfan-II
NGA #64	LAILG-NGA-64-4	1/5/16	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #168	LAILG-NGA-168-8	1/5/16	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Duplicate	LAILG-NGA-DUP	1/5/16	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Equip Blank	LAILG-NGA-EB	1/5/16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Field Blank	LAILG-NGA-FB	1/5/16	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
WQB			nl	0.59	nl	0.84	0.59	0.59	0.13	3.9	14	nl	19	nl	nl	0.14	110,000	110,000	110,000
MRL			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimate.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

M-04 Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 5 CONTINUATION
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides												Sample Notes
			Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Chlordane (tech)	Heptachlor	Heptachlor Epoxide	Methoxychl or	Mirex	Toxaphene	trans- Nonachlor	cis- Nonachlor	Total Chlordane	
NGA #64	LAILG-NGA-64-6	1/5/16	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #168	LAILG-NGA-168-1	1/5/16	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
Duplicate	LAILG-NGA-DUP	1/5/16	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
Equip Blank	LAILG-NGA-EB	1/5/16	<100	<5.0	<5.0	<100	68	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	
Field Blank	LAILG-NGA-FB	1/5/16	<100	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	
	WQB		nl	760	760	nl	0.21	0.1	nl	nl	0.75	nl	nl	0.59	
	MRL		100	5.0	5.0	100	5.0	5.0	5.0	5.0	500	5	5.0	5.0	

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

M-04

Due to the nature of matrix interferences, sample extract was diluted prior to analysis. The MDL and MRL were raised due to the dilution.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 4
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	Dieldrin	Endosulfan-Sulfate	Endosulphan-I	Endosulfan-II
NGA #150	LAILG-NGA-150-6	12/2/14	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
NGA #188	LAILG-NGA-188-1	12/2/14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Duplicate	LAILG-NGA-DUP	12/2/14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
NGA #168	LAILG-NGA-168-7	5/15/15	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Equip Blank	LAILG-NGA-EB	12/2/14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Field Blank	LAILG-NGA-FB	12/2/14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
WQB			nl	0.59	nl	0.84	0.59	0.59	0.13	3.9	14	nl	19	nl	nl	0.14	110,000	110,000	110,000
MRL			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimate.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

M-04 Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 4

CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides											Sample Notes	
			Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Chlordane (tech)	Heptachlor	Heptachlor Epoxide	Methoxychl or	Mirex	Toxaphene	trans- Nonachlor	cis- Nonachlor		
NGA #150	LAILG-NGA-150-6	12/2/14	<1000	<50	<50	<1000	<50	<50	<50	<50	<5000	<50	<50	<50	M-04
NGA #188	LAILG-NGA-188-1	12/2/14	<100	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	
Duplicate	LAILG-NGA-DUP	12/2/14	<100	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	
NGA #168	LAILG-NGA-168-7	5/15/15	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
Equip Blank	LAILG-NGA-EB	12/2/14	<100	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	
Field Blank	LAILG-NGA-FB	12/2/14	<100	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	
WQB			nl	760	760	nl	0.21	0.1	nl	nl	0.75	nl	nl	0.59	
MRL			100	5.0	5.0	100	5.0	5.0	5.0	5.0	500	5	5.0	5.0	

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

M-04

Due to the nature of matrix interferences, sample extract was diluted prior to analysis. The MDL and MRL were raised due to the dilution.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 3
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	Dieldrin	Endosulfan Sulfate	Endosulphan-I	Endosulfan-II
NGA #19	LAILG-NGA19-7	2/28/14	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #26	LAILG-NGA26-1	2/28/14	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #124	LAILG-NGA124-7	2/28/14	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #178	LAILG-NGA178-2	2/28/14	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
NGA #184	LAILG-NGA184-3	2/28/14	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Duplicate	LAILG-NGA-DUP	2/28/14	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
Equip Blank	LAILG-NGA-EB	2/28/14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
Field Blank	LAILG-NGA-FB	2/28/14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
WQB			nl	0.59	nl	0.84	0.59	0.59	0.13	3.9	14	nl	19	nl	nl	0.14	110,000	110,000	110,000
MRL			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimate.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

M-04

Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 3

CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides											Sample Notes	
			Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Chlordane (tech)	Heptachlor	Heptachlor Epoxide	Methoxychl or	Mirex	Toxaphene	trans- Nonachlor	cis- Nonachlor		
NGA #19	LAILG-NGA19-7	2/28/14	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #26	LAILG-NGA26-1	2/28/14	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #124	LAILG-NGA124-7	2/28/14	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #178	LAILG-NGA178-2	2/28/14	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
NGA #184	LAILG-NGA184-3	2/28/14	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
Duplicate	LAILG-NGA-DUP	2/28/14	<500	<25	<25	<500	<25	<25	<25	<25	<2500	<25	<25	<25	M-04
Equip Blank	LAILG-NGA-EB	2/28/14	<100	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	
Field Blank	LAILG-NGA-FB	2/28/14	<100	<5.0	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	
	WQB		nl	760	760	nl	0.21	0.1	nl	nl	0.75	nl	nl	0.59	
	MRL		100	5.0	5.0	100	5.0	5.0	5.0	5.0	500	5	5.0	5.0	

Concentrations are reported in nanograms per liter (ng/L). Results above WQB are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated.

CWIL Conditional waiver for irrigated lands
WQB Water Quality Benchmarks
MRL Method Reporting Limits
nl not listed

M-04

Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 1
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	Dieldrin	Endosulfan-Sulfate	Endosulphan-I	Endosulfan-II
NGA #4	LAILG-NGA4-5	3/21/11	nd	nd	nd	nd	17	21	nd	nd	nd	nd	13	18	nd	nd	nd	nd	
NGA #124	LAILG-NGA124-6	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	33^{FD}	nd	nd	nd	nd	
NGA # 150	LAILG-NGA 150-5	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #19	LAILG-NGA19-6	3/23/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Duplicate	LAILG-NGA-DUP	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	22	nd	nd	nd	
Equip Blank	LAILG-NGA-EB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Field Blank	LAILG-NGA- FB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #168	LAILG-NGA168-6	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd^{BSL}	nd	nd	
NGA #31	LAILG-NGA31-4	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd^{BSL}	nd	nd	
NGA #162	LAILG-NGA162-1	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd^{BSL}	nd	nd	
NGA #64	LAILG-NGA64-3	3/17/12	nd	nd	nd	nd	28^{FD}	nd	nd	nd	nd	nd	nd	nd	nd	nd^{BSL}	nd	nd	
Duplicate	LAILG-NGA-DUP	3/17/12	nd	nd	nd	nd	51	nd	nd	nd	nd	nd	nd	nd	nd	nd^{BSL}	nd	nd	
Equip Blank	LAILG-NGA-EB	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd^{BSL}	nd	nd	
Field Blank	LAILG-NGA- FB	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd^{BSL}	nd	nd	
NGA #4	LAILG-NGA4-6	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #170	LAILG-NGA170-1	3/25/12	nd	nd	nd	nd	9.6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #176	LAILG-NGA176-2	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #210	LAILG-NGA210-2	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Duplicate	LAILG-NGA-DUP	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Equip Blank	LAILG-NGA-EB	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Field Blank	LAILG-NGA- FB	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
CWIL Limits			nl	0.59	nl	0.84	0.59	0.59	nl	nl	nl	nl	nl	nl	0.14	nl	nl	nl	
MDL			5.0	5.0	5.0	5.0	2.5	3.1	1.5	1.8	3.1	2.5	2.1	5.0	5.0	2.1	5.0	1.7	1.9
RL			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL Conditional waiver for irrigated lands

S4 The surrogate recovery for this sample is outside of established control limits due to possible sample matrix effect.

FD Estimated concentration. Field Duplicate RPD >25%

SGC Surrogate recovery outside of control limits due to a possible matrix effect. The data was accepted based on valid recovery of the remaining surrogate.

J Estimated concentrations, results above MDL but less than R

BS-L The recovery of this analyte in the BS/LCS was below the control limit. Sample result is suspect.

MDL Method Detection Limit

RL Reporting Limits

nd not detected

nl not listed

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 1

CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides										
			Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Methoxychl or	Mirex	Toxaphene	trans- Nonachlor	Total Chlordane
NGA #4	LAILG-NGA#4-2	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	8.6	39.6
NGA #124	LAILG-NGA#124-3	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA # 150	LAILG-NGA 150-3	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	LAILG-NGA#19-2	3/23/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Duplicate	LAILG-NGA-DUP	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Equip Blank	LAILG-NGA-EB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Field Blank	LAILG-NGA- FB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	LAILG-NGA168-6	3/17/12	nd	nd	nd	nd ^{S4}	nd	nd	nd	nd	nd	nd	nd
NGA #31	LAILG-NGA31-4	3/17/12	nd	nd	nd	nd ^{S4}	nd	nd	nd	nd	nd	nd	nd
NGA #162	LAILG-NGA162-1	3/17/12	nd	nd	nd	nd ^{S4}	nd	nd	nd	nd	nd	nd	nd
NGA #64	LAILG-NGA64-3	3/17/12	nd	nd	nd	nd ^{S4}	nd	nd	nd	nd	nd	nd	nd
Duplicate	LAILG-NGA-DUP	3/17/12	nd	nd	nd	nd ^{S4}	nd	nd	nd	nd	nd	nd	nd
Equip Blank	LAILG-NGA-EB	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Field Blank	LAILG-NGA- FB	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #4	LAILG-NGA4-6	3/25/12	nd	nd	nd	nd ^{SGC}	nd	nd	nd	nd	nd	nd	nd
NGA #170	LAILG-NGA170-1	3/25/12	nd	nd	nd	nd ^{SGC}	nd	nd	nd	nd	nd	nd	nd
NGA #176	LAILG-NGA176-2	3/25/12	nd	nd	nd	nd ^{SGC}	nd	nd	nd	nd	nd	nd	nd
NGA #210	LAILG-NGA210-2	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Duplicate	LAILG-NGA-DUP	3/25/12	nd	nd	nd	nd ^{S4}	nd	nd	nd	nd	nd	nd	nd
Equip Blank	LAILG-NGA-EB	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Field Blank	LAILG-NGA- FB	3/25/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CWIL Limits			nl	nl	nl	nl	nl	nl	nl	0.75	nl	0.59	
MDL			40	2.8	3.0	2.0	1.7	1.9	5.0	5.0	120	5.0	5.0
RL			100	5.0	5.0	20.0	5.0	5.0	5.0	500	5.0	5.0	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was deemed to be qualified as estim

CWIL Conditional waiver for irrigated lands

S4 The surrogate recovery for this sample is outside of established control limits due to possible sample matrix effect.

MDL Method Detection Limit

J Estimated concentrations, results above MDL but less than R

SGC Surrogate recovery outside of control limits due to a possible matrix effect . The data was accepted based on valid recovery of the remaining surrogate.

RL Reporting Limits

BS-L The recovery of this analyte in the BS/LCS was below the control limit. Sample result is suspect.

nd not detected

BS-L

nl not listed

FD Estimated concentration. Field Duplicate RPD >25%

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	cis-Nonachlor	DCPA	Dicofol	Dieldrin
NGA #110	LAILG-NGA110-1	1/4/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #189	LAILG-NGA189-1	1/4/08	nd	nd	nd	nd	22.5	nd	nd	nd	nd	nd	nd	6	nd	nd	nd	nd	
NGA #19	LAILG-NGA19-3	1/5/08	nd	nd	nd	nd	5.6	nd	nd	nd	nd	nd	nd	2.3 ^j	nd	nd	nd	nd	
NGA #124	LAILG-NGA124-3	1/5/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #183	LAILG-NGA183-4	1/5/08	nd	nd	nd	12	26.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #4	LAILG-NGA4-2	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #53	LAILG-NGA53-2	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #64	LAILG-NGA64-1	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #130	LAILG-NGA130-3	1/24/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #182	LAILG-NGA182-2	1/24/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #168	LAILG-NGA168-4	1/25/08	nd	nd	nd	nd	19.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 19	LAILG-NGA19-4	8/12/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.0 ⁱ	2.1 ^j	nd	nd	nd	
NGA # 4	LAILG-NGA 4-3	8/13/08	nd	nd ^{M4}	nd	nd	nd	nd	nd	nd ^{M4}	nd	nd	nd	9.2 ^{Q2,FD}	9.8 ^{M4,Q2,FD}	12.7 ^{Q2,FD}	nd	485.7 ^{Q1,Q2,FD}	nd ^{M4}
Duplicate	LAILG-NGA-DUP	8/13/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	29.8 ^{FD}	41.3 ^{FD}	44.5 ^{FD}	nd	1064.5 ^{FD}	nd
NGA # 31	LAILG-NGA 31-1	9/23/08	nd	nd	nd	nd	13.5	nd	nd	nd	nd	nd	nd	nd	7.6 ^{FD}	nd	nd	nd	
Duplicate	LAILG-NGA-DUP	9/23/08	nd	nd	nd	nd	13.6	nd	nd	nd	nd	nd	nd	nd	11.6 ^{FD}	nd	nd	nd	
NGA # 19	LAILG-NGA 19-5	11/26/08	nd	nd	nd	nd	24.7^{Q6}	nd	nd	nd	nd	nd	nd	7.5 ^{Q3}	6.1	nd	nd	nd	
NGA # 210	LAILG-NGA 210-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 184	LAILG-NGA 184-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Duplicate	LAILG-NGA-DUP	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 124	LAILG-NGA 124-4	11/26/08	nd	nd	nd	19.3	nd	nd	nd	nd	nd	nd	nd	3.7 ⁱ	2.8 ⁱ	nd	nd	nd	nd
NGA # 31	LAILG-NGA 31-2	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.8	6.3	nd	nd	nd	nd
NGA # 130	LAILG-NGA 130-4	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	6.7 ^j	nd	nd	
NGA # 150	LAILG-NGA 150-3	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 25	LAILG-NGA 25-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	5.6	4.9 ^j	1.0 ⁱ	nd	nd	nd
NGA # 150	LAILG-NGA 150-4	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 124	LAILG-NGA 124-5	12/15/08	nd	nd	nd	10.4	nd	nd	nd	nd	nd	nd	nd	5.5	4.2 ^j	nd	6.3 ^j	nd	nd
NGA # 189	LAILG-NGA 189-2	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 110	LAILG-NGA 110-2	12/15/08	nd	nd	nd	6.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 31	LAILG-NGA 31-3	12/15/08	nd	nd	nd	nd	22	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 130	LAILG-NGA 130-5	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 178	LAILG-NGA 178-1	12/15/08	nd	nd ^{M4}	nd ^{M4}	nd ^{M4}	25.3^{FD}	nd ^{M4}	nd	nd	nd ^{M4}	nd	nd	nd	nd	nd	nd	nd	
Duplicate	LAILG-NGA-DUP	12/15/08	nd	nd	nd	nd	nd ^{FD}	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 64	LAILG-NGA 64-2	12/15/08	nd	nd	nd	nd	43.3	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 168	LAILG-NGA 168-5	12/15/08	nd	nd	nd	nd	11.8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 4	LAILG-NGA 4-4	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	35.1	34.2	6.5	nd	nd	nd
CWIL Limits			nl	nl	nl	0.59	0.59	0.83	0.13	3.9	14	nl	19	a)	a)	a)	nl	nl	0.14
MDL			1	1	1	1	1	1	1	1	1	1	1	1	1	5	50	1	
RL			5	5	5	5	5	5	5	5	5	5	5	5	5	10	100	5	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL

Conditional waiver for irrigated lands

FD

Estimated concentration. Field Duplicate RPD >25%

J

Estimated concentrations, results above MDL but less than R

MDL

Method Detection Limit

RL

Reporting Limits

nd

not detected

nl

not listed

M4

Spike or surrogate compound recovery was out of control due to matrix interference. The associated method blank spike Q3 or surrogate compound was in control and therefore the sample data was reported without further clarification.

Q1

Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding Q6 the spike concentration.

Q2

The sample RPD was out of control. Sample is heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices.

RPD values are not accurate and not applicable because the results for R1 and/or R2 are lower than ten times the MDL.

<p

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides															
			Endosulfan Sulfate	Endosulphan-I	Endosulfan-II	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	Kepone	Mirex	Oxychlordane	Perthane	Toxaphene	trans-Nonachlor	Total Chlordane
NGA #110	LAILG-NGA#110-1	1/4/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #189	LAILG-NGA#189-1	1/4/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	8.9	14.9	
NGA #19	LAILG-NGA#19-2	1/5/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	14	16.3	
NGA #124	LAILG-NGA#124-3	1/5/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	17.1	17.1	
NGA #183	LAILG-NGA#183-4	1/5/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #4	LAILG-NGA#4-2	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #53	LAILG-NGA#53-2	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #64	LAILG-NGA#64-1	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #130	LAILG-NGA#130-3	1/24/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #182	LAILG-NGA#182-2	1/24/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #168	LAILG-NGA#168-4	1/25/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 19	LAILG-NGA19-4	8/12/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.3 ^j	4.4^j	
NGA # 4	LAILG-NGA 4-3	8/13/08	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd	nd	nd	nd ^{M4}	nd ^{M4}	nd ^{M4,02,FD}	38.8	
Duplicate	LAILG-NGA-DUP	8/13/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	27 ^{FD}	124.4	
NGA # 31	LAILG-NGA 31-1	9/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.6	15.2	
Duplicate	LAILG-NGA-DUP	9/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	8.5	20.1	
NGA # 19	LAILG-NGA 19-5	11/26/08	nd	nd	nd	nd	339.4 ^{Q3}	nd	nd	nd	nd	nd	nd	nd	nd	6.6 ^{L,Q3}	20.2^j	
NGA # 210	LAILG-NGA 210-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 184	LAILG-NGA 184-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Duplicate	LAILG-NGA-DUP	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 124	LAILG-NGA 124-4	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.7 ^j	8.2^j	
NGA # 31	LAILG-NGA 31-2	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.8 ^j	17.9^j	
NGA # 130	LAILG-NGA 130-4	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 150	LAILG-NGA 150-3	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 25	LAILG-NGA 25-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{Q6}	nd	nd	nd	nd	4.7 ^j	16.2^j	
NGA # 150	LAILG-NGA 150-4	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 124	LAILG-NGA 124-5	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.9 ^j	13.6^j	
NGA # 189	LAILG-NGA 189-2	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 110	LAILG-NGA 110-2	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 31	LAILG-NGA 31-3	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 184	LAILG-NGA 184-2	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	4.2^j	
NGA # 130	LAILG-NGA 130-5	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 178	LAILG-NGA 178-1	12/15/08	nd ^{M4}	nd ^{M4}	nd	nd	nd	nd	nd	nd	nd ^{M4}	nd	nd	nd	nd	nd	nd	
Duplicate	LAILG-NGA-DUP	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 64	LAILG-NGA 64-2	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	666	nd	nd	
NGA # 168	LAILG-NGA 168-5	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA # 4	LAILG-NGA 4-4	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	23.7	99.5	
CWIL Limits			nl	5.6	5.6	36	nl	nl	0.21	0.1	nl	nl	nl	a)	nl	25	a)	0.57
MDL			1	1	1	1	1	1	1	1	1	1	1	5	10	1	1	
RL			5	5	5	5	5	5	5	5	5	5	5	10	50	5	5	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estim

CWIL Conditional waiver for irrigated lands

M4

Spike or surrogate compound recovery was out of control due to matrix interference. The associated method blank spike or surrogate compound was in control and therefore the sample data was reported without further clarification.

Q3

RPD values are not accurate and not applicable because the results for R1 and/or R2 are lower than ten times the MDL.

MDL Method Detection Limit

Q6

CRG's Quality Assurance Program Document allows for 5% of the target compounds greater than ten times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and cannot be attributed to a spe

J Estimated concentrations, results above MDL but less than R

RL Reporting Limits

nd not detected

nl not listed

FD Estimated concentration. Field Duplicate RPD >25%

Q2

The sample RPD was out of control. Sample is heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices.

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides																
			2,4'-DDD	2, 4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	BHC-alpha	BHC-beta	BHC-delta	BHC-gamma	Chlordane-alpha	Chlordane-gamma	cis-Nonachlor	DCPA	Dicofol	Dieldrin
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	22.8	34.7	16.1	nd	nd	nd	nd	nd	nd	nd	nd	68.3^j	nd	
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	nd	nd	22.5	15.3	13.7	nd	nd	nd	nd	nd	nd	nd	12.1	nd	nd	nd
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA FBLL	NGA-LAILG-FBLL	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA EQBLI	NGA-LAILG-EQBLI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #150	NGA-#150-LAILG	9/25/07	nd	nd	nd	nd	nd ^b	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #183	ILG-#183	9/26/07	25^b	nd	31.8^b	90.3^b	113.8^b	51.1^{b,d}	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #183-DUP	ILGNGA-#Dup	9/26/07	nd ^b	nd	nd ^b	64.5^b	70.2^b	nd ^{b,d}	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #168-2	ILGNGA-#168-2	9/28/07	nd	nd	17.3	16.7	nd	84^b	nd	nd	nd	nd	nd	nd	nd	52^j	nd	nd	
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	nd	2.7^j	nd ^c	nd	nd	nd	nd	1.4 ⁱ	1.4 ^j	1.1 ^j	nd	nd	nd	nd	
NGA #182	NGA #182-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #182-DUP	NGA-Duplicate	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #4	NGA #4-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #130	NGA #130-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #150	NGA #150-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	35.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	nd	nd	6.0	22.1	9.3	nd	nd	nd	nd	1.1 ^j	3.0 ^j	nd	nd	63.7^j	nd	
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #176	LAILG-NGA#176-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #183	LAILG-NGA#183-3	12/18/07	36.8	5.7	20.6	224.8	344.4	73.5	nd	nd	nd	nd	nd	nd	nd	nd	51.5^j	nd	
NGA #19	LAILG-NGA#19-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #13	LAILG-NGA#13-1	12/18/07	nd	nd	nd	32.7	nd	nd	nd	nd	nd	nd	18	19.2	19.6	nd	nd	nd	
NGA #53	LAILG-NGA#53-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
CWIL Limits			nl	nl	nl	0.59	0.59	0.83	0.13	3.9	14	nl	19	a)	a)	a)	nl	nl	0.14
MDL			1	1	1	1	1	1	1	1	1	1	1	1	1	5	50	1	
RL			5	5	5	5	5	5	5	5	5	5	5	5	5	10	100	5	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL Conditional waiver for irrigated lands
A Component of total chlordane, see total chlordane for CWIL limitatio
B Estimated concentration, RPD of duplicate sample >25%
C Procedural blank Matrix Spike recovery out of limit:
D Procedural blank Matrix Spike Duplicate RPD out of limit
J Estimated concentrations, results above MDL but less than R

MDL Method Detection Limit
MDL Reporting Limits
nd not detected
nl not listed
na not analyzed

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
CHLORINATED PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Chlorinated Pesticides															trans-Nonachlor	Total Chlordane
			Endosulfan Sulfate	Endosulphan-I	Endosulfan-II	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	Kepone	Mirex	Oxychlordane	Perthane	Toxaphene			
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	21.9	34		
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd		
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA FBLL	NGA-LAILG-FBLL	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA EQBLI	NGA-LAILG-EQBLI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #150	NGA-#150-LAILG	9/25/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd ^D	nd	nd	nd	nd		
NGA #183	ILG-#183	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd ^D	nd	nd	nd	nd		
NGA #183-DUP	ILGNGA-#Dup	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd ^D	nd	nd	nd	nd		
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #168-2	ILGNGA-#168-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd ^D	nd	nd	nd	nd		
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	nd	nd	nd	nd	nd	nd ^C	nd	nd	nd	nd	nd	1.7 ^J	5.6^I		
NGA #182	NGA-#182-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #182-DUP	NGA-Duplicate	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #4	NGA #4-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #130	NGA #130-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #150	NGA #150-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	7.3	11.4		
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #176	LAILG-NGA#176-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd ^C	nd	nd	nd	nd	nd	nd		
NGA #183	LAILG-NGA#183-3	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd ^C	nd	nd	nd	nd	nd	nd		
NGA #19	LAILG-NGA#19-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd ^C	nd	nd	nd	nd	2.4 ^I	2.4^I		
NGA #13	LAILG-NGA#13-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd ^C	nd	nd	nd	nd	54.1	110.9		
NGA #53	LAILG-NGA#53-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd ^C	nd	nd	nd	nd	nd	nd		
CWIL Limits			nl	5.6	5.6	36	nl	nl	0.21	0.1	nl	nl	nl	a)	nl	25	a)	0.57	
MDL			1	1	1	1	1	1	1	1	1	1	1	5	10	1	1		
RL			5	5	5	5	5	5	5	5	5	5	5	10	50	5	5		

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented in **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL Conditional waiver for irrigated lands
A Component of total chlordane, see total chlordane for CWIL limitation
B Estimated concentration, RPD of duplicate sample >25%
C Procedural blank Matrix Spike recovery out of limit:
D Procedural blank Matrix Spike Duplicate RPD out of limit
J Estimated concentrations, results above MDL but less than R

MDL Method Detection Limit
RL Reporting Limits
nd not detected
nl not listed
na not analyzed

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 2 INTERIM
ORGANOPHOSPHORUS PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Organophosphorus Pesticides																				Sample Notes			
			Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Morphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion	Trichloronate
NGA #124	LAILG-NGA-124-9	1/9/18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #178	LAILG-NGA-178-4	1/9/18	<10	<10	<10	<10	<10	<10	<10	<10	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #184	LAILG-NGA-184-4	1/9/18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #202	LAILG-NGA-202-2	1/9/18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	73	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #4	LAILG-NGA-4-9	3/22/18	<50	<50	360	<50	<50	<50	62	<50	<50	<50	<50	<50	160	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
NGA #19	LAILG-NGA-19-9	3/22/18	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
NGA #64	LAILG-NGA-64-5	3/22/18	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
NGA #168	LAILG-NGA-168-9	3/22/18	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
	WQB		80	nl	50	37	nl	nl	100	35	21,500	1,950	22,000	nl	nl	2,600	49	nl	485	nl	70	300	nl	nl	nl	
	MRL		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits or ALB guidelines are presented in BOL. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

CWIL Conditional waiver for irrigated lands, order #R4-2005-0080

MRL Method Detection Limits

WQB Water Quality Benchmarks

* Estimated concentration. Field Duplicate RPD >25%.

nl not listed

nd not detected

M-02 Due to the nature of matrix interferences, sample was diluted prior to preparation. The MDL and MRL were raised due to the dilution.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 1 INTERIM
ORGANOPHOSPHORUS PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Organophosphorus Pesticides																				Sample Notes		
			Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Morphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion
NGA #4	LAILG-NGA-4-8	1/20/17	<10	<10	11	<10	<10	<10	17	<10	<10	<10	<10	<10	<10	<10	30	<10	<10	<10	<10	<10	<10	<10	<10
NGA #19	LAILG-NGA-19-8	1/20/17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
NGA #176	LAILG-NGA-176-3	1/20/17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Duplicate	LAILG-NGA-DUP	1/20/17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
NGA #124	LAILG-NGA-124-8	2/17/17	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
NGA #150	LAILG-NGA-150-7	2/17/17	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
NGA #158	LAILG-NGA-158-1	2/17/17	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
NGA #178	LAILG-NGA-178-3	2/17/17	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
NGA #202	LAILG-NGA-202-1	2/17/17	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	M-02
WQB			80	n.l.	25	37	n.l.	100	35	21,500	1,950	22,000	n.l.	2,600	295	n.l.	485	n.l.	70	300	n.l.	n.l.	n.l.	n.l.	
MRL			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL limits or ALB guidelines are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

CWIL Conditional waiver for irrigated lands, order #R4-2005-0080

MRL Method Detection Limits

WQB Water Quality Benchmarks

! Estimated concentration. Field Duplicate RPD >25%.

n.l. not listed

nd not detected

M-02 Due to the nature of matrix interferences, sample was diluted prior to preparation. The MDL and MRL were raised due to the dilution.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 5 CONTINUATION
ORGANOPHOSPHORUS PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Organophosphorus Pesticides																				Sample Notes			
			Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Morphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion	Trichloronate
NGA #64	LAILG-NGA-64-4	1/5/16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #168	LAILG-NGA-168-8	1/5/16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Duplicate	LAILG-NGA-DUP	1/5/16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Equip Blank	LAILG-NGA-EB	1/5/16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Field Blank	LAILG-NGA-FB	1/5/16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	WQB		80	nI	25	37	nI	nI	100	35	21,500	1,950	22,000	nI	nI	2,600	295	nI	485	nI	70	300	nI	nI	nI	
	MRL		10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10.0	10	10	10	10

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL limits or ALB guidelines are presented in BOL. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

CWIL Conditional waiver for irrigated lands, order #R4-2005-0080

MRL Method Detection Limits

WQB Water Quality Benchmarks

: Estimated concentration. Field Duplicate RPD >25%.

nI not listed

nd not detected

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 4
ORGANOPHOSPHORUS PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Organophosphorus Pesticides																		Sample Notes				
			Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Morphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion
NGA #150	LAILG-NGA-150-6	12/2/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #188	LAILG-NGA-188-1	12/2/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Duplicate	LAILG-NGA-DUP	12/2/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #168	LAILG-NGA-168-7	5/15/15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Equip Blank	LAILG-NGA-EB	12/2/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Field Blank	LAILG-NGA-FB	12/2/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
WQB			80	nl	25	37	nl	nl	100	35	21,500	1,950	22,000	nl	nl	2,600	295	nl	485	nl	70	300	nl	nl	nl
MRL			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL limits or ALB guidelines are presented in BOL. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

CWIL Conditional waiver for irrigated lands, order #R4-2005-0080
MRL Method Detection Limits
WQB Water Quality Benchmarks
! Estimated concentration. Field Duplicate RPD >25%.
nl not listed
nd not detected

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 3
ORGANOPHOSPHORUS PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Organophosphorus Pesticides																				Sample Notes			
			Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Morphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion	Trichloronate
NGA #19	LAILG-NGA19-7	2/28/14	<10	<10	22!	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #26	LAILG-NGA26-1	2/28/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	23	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #124	LAILG-NGA124-7	2/28/14	<10	<10	17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #178	LAILG-NGA178-2	2/28/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
NGA #184	LAILG-NGA184-3	2/28/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Duplicate	LAILG-NGA-DUP	2/28/14	<10	<10	31!	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Equip Blank	LAILG-NGA-EB	2/28/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Field Blank	LAILG-NGA-FB	2/28/14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
WQB			80	nl	25	37	nl	nl	100	35	21,500	1,950	22,000	sl	nl	2,600	295	nl	485	nl	70	300	nl	nl	nl	nl
MRL			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits or ALB guidelines are presented in BOL. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

CWIL Conditional waiver for irrigated lands, order #R4-2005-0080

MRL Method Detection Limits

WQB Water Quality Benchmarks

* Estimated concentration. Field Duplicate RPD >25%.

nl not listed

nd not detected

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 1
ORGANOPHOSPHORUS PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Organophosphorus Pesticides																		Sample Notes					
			Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Morphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion	Trichlorfonate
NGA #4	LAILG-NGA4-5	3/21/11	nd	nd	11000^{E1}	nd	nd ^{Q-02}	nd ^{Q-02}	1000^{E1}	nd	nd ^{MS-05}	nd ^{Q-02}	nd	nd	nd	7300^{E1}	nd	nd	nd	nd	nd	nd	nd	nd	S4	
NGA #124	LAILG-NGA124-6	3/21/11	nd	nd	10	nd	nd ^{Q-02}	nd ^{Q-02}	nd	nd	nd ^{MS-05}	nd ^{Q-02}	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			
NGA #150	LAILG-NGA 150-5	3/21/11	nd	nd	33	nd	nd ^{Q-02}	nd ^{Q-02}	nd	nd	nd ^{MS-05}	nd ^{Q-02}	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			
NGA #19	LAILG-NGA19-6	3/23/11	nd ^{MS-05,BS-L}	nd ^{MS-05}	25	nd	nd	nd	nd	nd ^{MS-05}	nd ^{BS-03}	nd	nd	nd ^{MS-05}	nd ^{BS-03}	nd	nd ^{Q-08}	nd	nd	nd ^{MS-05}	nd	nd	nd	nd		
Duplicate	LAILG-NGA-DUP	3/21/11	nd	nd	11	nd	nd ^{Q-02}	nd ^{Q-02}	nd	nd	nd ^{MS-05}	nd ^{Q-02}	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
Equip Blank	LAILG-NGA-EB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
Field Blank	LAILG-NGA-FB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		
NGA #168	LAILG-NGA168-6	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd ^{Q-08}	nd	nd	nd	nd	nd		
NGA #31	LAILG-NGA31-4	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd	nd	nd	nd	nd		
NGA #162	LAILG-NGA162-1	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd	nd	nd ^{Q-08}	nd	nd	nd ^{Q-08}	nd	nd ^{Q-08}	nd	nd	nd	nd	nd	nd		
NGA #64	LAILG-NGA64-3	3/17/12	nd ^{BS-03}	nd	nd	nd	nd	nd	nd	nd	nd ^{MS-05}	nd	nd	nd	nd	nd ^{MS-05}	nd	nd	nd	nd	nd	nd	nd	nd		
Duplicate	LAILG-NGA-DUP	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd	nd	nd	nd	nd		
Equip Blank	LAILG-NGA-EB	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd	nd	nd	nd	nd		
Field Blank	LAILG-NGA-FB	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd	nd	nd	nd	nd		
NGA #4	LAILG-NGA4-4	3/25/12	nd ^{BS-03}	nd	44,000	nd ^{BS-03}	nd ^{BS-03}	nd ^{Q-12}	nd	nd ^{MS-05}	nd	nd	nd ^{Q-08,BS-03}	nd	2,100^{Q-08,A-01a}	nd ^{BS-03}	nd	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd	nd	nd		
NGA #170	LAILG-NGA170-1	3/25/12	nd ^{MS-05,BS-L}	nd	nd	nd ^{BS-03}	nd	nd	nd	nd	nd ^{MS-05}	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd ^{MS-05}	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd		
NGA #176	LAILG-NGA176-2	3/25/12	nd ^{MS-05,BS-L}	nd	nd	nd ^{BS-03}	nd	nd	nd	nd	nd ^{MS-05}	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd ^{MS-05}	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd		
NGA #210	LAILG-NGA210-2	3/25/12	nd ^{MS-05,BS-L}	nd	nd	nd ^{BS-03}	nd	nd	nd	nd	nd ^{MS-05}	nd	nd ^{Q-08}	nd ^{Q-08}	nd	nd	nd ^{MS-05}	nd	nd ^{Q-08,A-01}	nd	nd	nd	nd	nd		
Duplicate	LAILG-NGA-DUP	3/25/12	nd ^{BS-03}	nd	42,000	nd ^{BS-03}	nd ^{BS-03}	nd ^{Q-12}	nd	nd ^{MS-05}	nd	nd	nd ^{Q-08,BS-03}	nd	2,000^{Q-08,A-01a}	nd ^{BS-03}	nd	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd	nd	nd		
Equip Blank	LAILG-NGA-EB	3/25/12	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd ^{BS-03}	nd ^{Q-12}	nd	nd ^{MS-05}	nd	nd	nd ^{Q-08,BS-03}	nd	nd^{Q-08,A-01a}	nd ^{BS-03}	nd	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd	nd	nd		
Field Blank	LAILG-NGA-FB	3/25/12	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd ^{BS-03}	nd ^{Q-12}	nd	nd ^{MS-05}	nd	nd	nd ^{Q-08,BS-03}	nd	nd^{Q-08,A-01a}	nd ^{BS-03}	nd	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd	nd	nd		
CWIL Limits			nl	nl	25	nl	nl	nl	100	nl	nl ⁽¹⁾	nl ⁽¹⁾	nl	nl	nl	nl ⁽¹⁾	nl	nl	nl ⁽¹⁾	nl	nl	nl ⁽¹⁾	nl	nl		
MDL			5.5	4.6	6.9	5.1	10	10	5.2	2.9	6.2	10	6.7	5.4	2.9	3.8	7.6	5.8	6.3	4.2	7.6	3.0	4.1	3.1	7.8	6.7
RL			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL limits or ALB guidelines are presented in BOL. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be reliable.

E1 The concentration indicated for this analyte is an estimated value above the calibration range.
I4 The surrogate recovery for this sample is outside of established control limits due to possible sample matrix eff.
Q-08 High bias in the QC sample does not affect sample result since analyte was not detected or below the reporting limit.
A-01 High bias in MS and MSD. However, it does have an acceptable recovery. The batch was accepted since all samples were ND for this analyte.
A-01a Low recovery in BS and high recoveries in both MS/MSD. However, LL-ccv has an acceptable recovery. The batch was accepted since samples were either ND or yielded very high results.
Q-02 Low recovery of this analyte in the QC sample. The analyte's low level standard produced acceptable recovery indicating that the sample result might be accurately reported as non-det.
Q-02 Low recovery of this analyte in the QC sample. The analyte's low level standard produced acceptable recovery indicating that the sample result might be accurately reported as non-det.
MS-05 The spike recovery and/or RPD were outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is accept.
BS-L The recovery of this analyte in the BS/LCS was below the control limit. Sample result is suspect.
BS-03 The recovery of this analyte in the BS/LCS was outside the control limits. The sample result was accepted based on another acceptable BS/LCS and/or MS and MSD that meet BS criteria

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
ORGANOPHOSPHORUS PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Organophosphorus Pesticides																
			Bolstar	Chlorpyrifos	Demeton	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Fenchlorphos	Fensulfothion	Fenthion	Malathion	Morphos	Methyl Parathion	Mevinphos	Phorate	Tetrachlorvinphos
NGA #110	LAILG-NGA110-1	1/4/08	nd	88.5	nd	534.8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #189	LAILG-NGA189-1	1/4/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	LAILG-NGA19-3	1/5/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	LAILG-NGA124-3	1/5/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	LAILG-NGA183-4	1/5/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #4	LAILG-NGA4-2	1/23/08	nd	153.8	nd	2,212.1	nd	nd	nd	nd	nd	15,453.2	nd	nd	nd	nd	nd	nd	nd
NGA #53	LAILG-NGA53-2	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #64	LAILG-NGA64-1	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #130	LAILG-NGA130-3	1/24/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #182	LAILG-NGA182-2	1/24/08	nd	nd	nd	nd	nd	13.3	nd	nd	nd	nd	19.9	nd	nd	nd	nd	nd	nd
NGA #168	LAILG-NGA168-4	1/25/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	LAILG-NGA19-4	8/12/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #4	LAILG-NGA 4-3	8/13/08	nd ^{M4}	nd ^{M4}	6,058.9^{(1)0.02%}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	1,148,630⁽¹⁾	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	
Duplicate	LAILG-NGA-DUP	8/13/08	nd	nd	13586.8^{ED}	nd	nd	nd	nd	nd	nd	1,117,145	nd	nd	nd	nd	nd	nd	nd
NGA #31	LAILG-NGA 31-1	9/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Duplicate	LAILG-NGA-DUP	9/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	LAILG-NGA 19-5	11/26/08	nd	130.1	nd	32.6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #210	LAILG-NGA 210-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	56.4	nd	nd	nd	nd	nd	nd
NGA #184	LAILG-NGA 184-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Duplicate	LAILG-NGA-DUP	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	LAILG-NGA 124-4	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #31	LAILG-NGA 31-2	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #130	LAILG-NGA 130-4	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	LAILG-NGA 150-3	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #25	LAILG-NGA 25-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	LAILG-NGA 150-4	12/15/08	nd	90.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	LAILG-NGA 124-5	12/15/08	nd	21	nd	98.5	nd	nd	nd	nd	nd	85.3	nd	nd	nd	nd	nd	nd	nd
NGA #189	LAILG-NGA 189-2	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	26.9	nd	nd	nd	nd	nd	nd	nd
NGA #110	LAILG-NGA 110-2	12/15/08	nd	nd	nd	79.8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #31	LAILG-NGA 31-3	12/15/08	nd	44.5	nd	nd	nd	nd	nd	nd	3,433.9	nd	nd	nd	nd	nd	nd	nd	nd
NGA #184	LAILG-NGA 184-2	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #130	LAILG-NGA 130-5	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	85.2	nd	nd	nd	nd	nd	nd	nd	nd
NGA #178	LAILG-NGA 178-1	12/15/08	nd	nd	nd	nd	nd	nd	nd ^{M4}	nd	nd ^{M4}	nd	nd	nd	nd	nd ^{M4}	nd	nd	nd
Duplicate	LAILG-NGA-DUP	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #64	LAILG-NGA 64-2	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	LAILG-NGA 168-5	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	38.9	nd	nd	nd	nd	nd	nd	nd
NGA #4	LAILG-NGA 4-4	12/15/08	nd	590.9	nd	859	nd	nd	nd	nd	nd	102,357.2	nd	nd	nd	nd	nd	nd	nd
CWIL Limits			nl	25	nl	100	nl	nl ⁽¹⁾	nl ⁽¹⁾	nl ⁽¹⁾	nl	nl	nl ⁽¹⁾	nl	nl ⁽¹⁾	nl	nl ⁽¹⁾	nl	nl
MDL			2	1	1	2	3	3	1	1	2	1	2	3	1	1	8	6	2
RL			4	2	2	4	6	6	2	2	4	2	4	6	2	2	16	12	4
(1)																			

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits or ALB guidelines are presented in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

CWIL Conditional waiver for irrigated lands, order #R4-2005-00

M4

Spike or surrogate compound recovery was out of control due to matrix interference. The associated method blank spike Q1 or surrogate compound was in control and therefore the sample data was reported without further clarification.

Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration.

MDL Method Detection Limit

RL Reporting Limit

FD Estimated concentration. Field Duplicate RPD >25%

al not lost

nd not detected

(1) Although no discharge limits were set in the CWIL, the US EPA has set an aquatic life benchmark for this constituent. See Table

Q2

The sample RPD was out of control. Sample is heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices.

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
ORGANOPHOSPHORUS PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Organophosphorus Pesticides																		
			Bolstar	Chlorpyrifos	Demeton	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Fenchlorphos	Fensulfothion	Fenthion	Malathion	Mephos	Methyl Parathion	Mevinphos	Phorate	Tetrachlorvaphos	Tokuthion	Trichloronate
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA FBLI	NGA-LAILG-FBLI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA EQBLI	NGA-LAILG-EQBLI	8/21/07	nd	nd	nd	nd	nd	nd	nd ^D	nd	nd	nd	nd	nd ^D	nd	nd	nd ^D	nd	nd ^D	nd	nd
NGA #150	NGA-#150-LAILG	9/25/07	nd	nd	nd	nd	nd	nd	nd ^D	nd	nd	nd	nd	nd ^D	nd	nd	nd ^D	nd	nd	nd	nd
NGA #183	ILG-#183	9/26/07	nd	nd	nd	nd	nd	nd	nd ^D	nd	nd	nd	nd	nd ^D	nd	nd	nd ^D	nd	nd	nd	nd
NGA #183-DU	ILGNGA-#Dup	9/26/07	nd	nd	nd	nd	nd	nd	nd ^D	nd	nd	nd	nd	nd ^D	nd	nd	nd ^D	nd	nd	nd	nd
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd ^D	nd	nd	nd	nd	nd ^D	nd	nd	nd ^D	nd	nd	nd	nd
NGA #168-2	ILGNGA-#168-2	9/28/07	nd	nd	nd	nd	nd	nd	nd ^D	nd	nd	nd	nd	nd ^D	nd	nd	nd ^D	nd	nd	nd	nd
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	8.9	nd	nd	nd	nd	nd	nd	nd
NGA #182	NGA-#182-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #182-DU	NGA-Duplicate	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #4	NGA-#4-LAILG-1	12/7/07	nd	1,122.6	175.2	11.3	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #130	NGA-#130-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA-#150-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #176	NGA-#176-LAILG-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	LAILG-NGA#183-3	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	LAILG-NGA#19-2	12/18/07	nd	nd	nd	nd	15	nd	nd	nd	nd	nd	nd	nd	2,291.3	nd	nd	nd	nd	nd	nd
NGA #1	LAILG-NGA#13-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #53	LAILG-NGA#53-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CWIL Limits			nl	25	nl	100	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl
MDL			2	1	1	2	3	3	1	1	2	1	2	3	1	1	8	6	2	3	1
RL			4	2	2	4	6	6	2	2	4	2	4	6	2	2	16	12	4	6	2

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL Conditional waiver for irrigated lands, order #R4-2005-00
D Procedural blank Matrix Spike Duplicate RPD out of limit
nl not listed

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 2 INTERIM
PYRETHROID PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Pyrethroid Pesticides													Sample Notes	
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin /Tralomethrin	Dichloran	Fenopropothrin (Danitol)	Fenvalerate /Esfenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Tefluthrin	
NGA #124	LAILG-NGA-124-9	1/9/18	<40	180	<40	<40	<40	<40	<40	<40	<40	46	<100	<40	<200	<40	M-04
NGA #178	LAILG-NGA-178-4	1/9/18	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<50	<20	<100	<20	M-04
NGA #184	LAILG-NGA-184-4	1/9/18	<10	19	<10	<10	<10	<10	<10	<10	<10	290	43	<10	<50	<10	M-04
NGA #202	LAILG-NGA-202-2	1/9/18	<10	<10	<10	<10	13	<10	<10	<10	<10	34	<25	<10	<50	<10	M-04
NGA #4	LAILG-NGA-4-9	3/22/18	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<250	<100	<500	<100	M-04
NGA #19	LAILG-NGA-19-9	3/22/18	<20	<20	<20	<20	<20	<20	51	<20	<20	27	<50	<20	<100	<20	M-04
NGA #64	LAILG-NGA-64-5	3/22/18	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<50	<20	<100	<20	M-04
NGA #168	LAILG-NGA-168-9	3/22/18	<40	97	<40	<40	<40	<40	<40	<40	<40	<40	<100	<40	<200	<40	M-04
WQB			1,050	800	12.5	210	55	nl	265	25	3.5	140,000	19.5	3,100	2,200	35	
MRL			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	2.0	10	2.0	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented BOLD. **Footnotes in BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL
Conditional waiver for irrigated lands, order #R4-2005-00

WQB
Water Quality Benchmark
nl
not listed

M-04
S-GC

Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix
Surrogate recovery outside of control limits due to a possible matrix effect. The data was accepted based on valid recovery of the remaining surrogate.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 1 INTERIM
PYRETHROID PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Pyrethroid Pesticides													Sample Notes	
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin /Tralomethrin	Dichloran	Fenopropothrin (Danitol)	Fenvalerate /Esfenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Tefluthrin	
NGA #4	LAILG-NGA-4-8	1/20/17	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<250	<100	<500	<100	M-04
NGA #19	LAILG-NGA-19-8	1/20/17	<40	<40	<40	<40	<40	<40	64	<40	<40	<40	<100	<40	<200	<40	M-04
NGA #176	LAILG-NGA-176-3	1/20/17	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200	<500	<200	<1000	<200	M-04
Duplicate	LAILG-NGA-DUP	1/20/17	<40	<40	<40	<40	<40	<40	48	<40	<40	<40	<100	<40	<200	<40	M-04
NGA #124	LAILG-NGA-124-8	2/17/17	<100	3900	230	<100	<100	<100	<100	<100	<100	760	<250	<100	<500	<100	M-04
NGA #150	LAILG-NGA-150-7	2/17/17	<20	3900	<20	<20	<20	<20	670	<20	<20	<20	1900	<20	<100	<20	M-04
NGA #158	LAILG-NGA-158-1	2/17/17	<40	<40	<40	<40	54	<40	<40	<40	<40	<40	<100	<40	<200	<40	M-04
NGA #178	LAILG-NGA-178-3	2/17/17	<20	20	<20	<20	<20	<20	<20	<20	<20	<20	<50	<20	<100	<20	M-04
NGA #202	LAILG-NGA- 202-1	2/17/17	<40	42	<40	<40	54	<40	<40	<40	<40	<40	<100	<40	<200	<40	M-04
WQB			1,050	800	12.5	210	55	nl	265	25	3.5	140,000	10.6	3,100	2,200	35	
MRL			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	2.0	10	2.0	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL Conditional waiver for irrigated lands, order #R4-2005-008
WQB Water Quality Benchmark
nl not listed

M-04 Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix
S-GC Surrogate recovery outside of control limits due to a possible matrix effect. The data was accepted based on valid recovery of the remaining surrogate.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 5 CONTINUATION
PYRETHROID PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Pyrethroid Pesticides													Sample Notes	
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin /Tralomethrin	Dichloran	Fenopropothrin (Danitol)	Fenvalerate /Esfenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Tefluthrin	
NGA #64	LAILG-NGA-64-4	1/5/16	<2.0	2.0	<2.0	<2.0	<2.0	2.6	<2.0	<2.0	<2.0	2.7	<2.0	<2.0	<10	<2.0	
NGA #168	LAILG-NGA-168-8	1/5/16	<2.0	310	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	69	<2.0	<2.0	<10	<2.0	
Duplicate	LAILG-NGA-DUP	1/5/16	<2.0	250	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	50	<2.0	<2.0	<10	<2.0	
Equip Blank	LAILG-NGA-EB	1/5/16	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0	
Field Blank	LAILG-NGA-FB	1/5/16	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0		
WQB			1,050	800	12.5	210	55	nl	265	25	3.5	140,000	10.6	3,100	2,200	35	
MRL			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	2.0	10	2.0	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL Conditional waiver for irrigated lands, order #R4-2005-008
WQB Water Quality Benchmark
nl not listed

M-04 Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix
S-GC Surrogate recovery outside of control limits due to a possible matrix effect. The data was accepted based on valid recovery of the remaining surrogate.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 4
PYRETHROID PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Pyrethroid Pesticides													Sample Notes	
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin /Tralomethrin	Dichloran	Fenopropothrin (Danitol)	Fenvalerate /Esfenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Tefluthrin	
NGA #150	LAILG-NGA-150-6	12/2/14	<2.0	4000	<2.0	<2.0	<2.0	<2.0	370	<2.0	<2.0	<2.0	1000	<2.0	<10	<2.0	
NGA #188	LAILG-NGA-188-1	12/2/14	<2.0	51	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	30	<2.0	<2.0	<10	<2.0	
Duplicate	LAILG-NGA-DUP	12/2/14	<2.0	41	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	30	<2.0	<2.0	<10	<2.0	
NGA #168	LAILG-NGA-168-7	5/15/15	<2.0	22	<2.0	<2.0	<2.0	2.3	<2.0	<2.0	<2.0	460	<5.0	<2.0	<10	<2.0	
Equip Blank	LAILG-NGA-EB	12/2/14	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0		
Field Blank	LAILG-NGA- FB	12/2/14	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0		
WQB			1,050	800	12.5	210	55	nl	265	25	3.5	140,000	10.6	3,100	2,200	35	
MRL			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	2.0	10	2.0	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL

Conditional waiver for irrigated lands, order #R4-2005-008

WQB

Water Quality Benchmark

nl

not listed

M-04

Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix

S-GC

Surrogate recovery outside of control limits due to a possible matrix effect. The data was accepted based on valid recovery of the remaining surrogate.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 3
PYRETHROID PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Pyrethroid Pesticides													Sample Notes	
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin /Tralomethrin	Dichloran	Fenopropothrin (Danitol)	Fenvalerate /Esfenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Tefluthrin	
NGA #19	LAILG-NGA19-7	2/28/14	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	28	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0	
NGA #26	LAILG-NGA26-1	2/28/14	<2.0	9.4	20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0	
NGA #124	LAILG-NGA124-7	2/28/14	<10	3,700	<10	<10	<10	<10	170	<10	<10	<10	46	<10	<50	<10	M-04, S-GC
NGA #178	LAILG-NGA178-2	2/28/14	<20	40	<20	<20	<20	<20	<20	<20	<20	<20	<50	<20	<100	<20	M-04, S-GC
NGA #184	LAILG-NGA184-3	2/28/14	<2.0	2.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0	
Duplicate	LAILG-NGA-DUP	2/28/14	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	32	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0	
Equip Blank	LAILG-NGA-EB	2/28/14	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0	S-GC
Field Blank	LAILG-NGA-FB	2/28/14	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<10	<2.0	S-GC
WQB			1,050	800	12.5	210	55	nl	265	25	3.5	140,000	10.6	3,100	2,200	35	
MRL			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	2.0	10	2.0	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented BOLD. **Footnotes in BOLD indicate estimated concentration.** All other footnotes are for reference purposes; data was not deemed to be qualified as estimated.

CWIL
Conditional waiver for irrigated lands, order #R4-2005-00

WQB
Water Quality Benchmark
nl
not listed

M-04
S-GC

Visual evaluation of the sample indicates the RPD or QC spike is above the control limit due to a non-homogeneous sample matrix.
Surrogate recovery outside of control limits due to a possible matrix effect. The data was accepted based on valid recovery of the remaining surrogate.

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 1
PYRETHROID PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Pyrethroid Pesticides												Sample Notes		
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin	Dichloran	Esfenvalerate	Fenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin		
NGA #4	LAILG-NGA4-5	3/21/11	nd	22	nd	nd	nd	nd	nd	nd	nd	3.3	1600^{E1}	nd	nd	nd	S4
NGA #124	LAILG-NGA124-6	3/21/11	nd	88	nd	78 ^{FD}	nd	nd	nd	nd	nd	3.8	nd	nd	nd	nd	
NGA # 150	LAILG-NGA 150-5	3/21/11	nd	480 ^{E1}	nd	nd	nd	nd	nd	nd	nd	nd	48	nd	nd	nd	
NGA #19	LAILG-NGA19-6	3/23/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	29	nd	nd	nd	nd	
Duplicate	LAILG-NGA-DUP	3/21/11	nd	74	nd	57	nd	nd	nd	nd	nd	3.7	nd	nd	nd	nd	
Equip Blank	LAILG-NGA-EB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Field Blank	LAILG-NGA- FB	3/21/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	
NGA #168	LAILG-NGA168-6	3/17/12	nd	54	nd	nd	nd	nd ^{BS-03}	nd	nd	nd	18	nd	nd	nd	nd	S4
NGA #31	LAILG-NGA31-4	3/17/12	nd	2.9	nd	nd	nd	nd ^{BS-03}	nd	nd	nd	33	nd	nd	nd	nd	S4
NGA #162	LAILG-NGA162-1	3/17/12	nd	11	nd	nd	230	nd ^{BS-03}	nd	nd	nd	23	nd	nd	nd	nd	S4
NGA #64	LAILG-NGA64-3	3/17/12	nd	nd	nd	nd	nd	nd ^{BS-03}	nd	nd	nd	22	nd	nd	nd	nd	S4
Duplicate	LAILG-NGA-DUP	3/17/12	nd	nd	nd	nd	nd	nd ^{BS-03}	nd	nd	nd	20	nd	nd	nd	nd	S4
Equip Blank	LAILG-NGA-EB	3/17/12	nd	nd	nd	nd	nd	nd ^{BS-03}	nd	nd	nd	nd	nd	nd	nd	nd	
Field Blank	LAILG-NGA- FB	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	S4
NGA #4	LAILG-NGA4-6	3/25/12	nd ^{BS-03}	9.7	nd	nd	nd	nd	nd	nd	nd	nd ^{FD,BS-03}	100^{FD}	nd	nd	nd ^{BS-03}	S4
NGA #170	LAILG-NGA170-1	3/25/12	nd ^{BS-03}	5.8	nd	nd	nd	nd	nd	nd	nd	11 ^{BS-03}	nd ^{BS-03}	nd	nd	nd ^{BS-03}	S4
NGA #176	LAILG-NGA176-2	3/25/12	nd ^{BS-03}	270	nd	nd	nd	nd	nd	nd	nd	35 ^{BS-03}	nd ^{BS-03}	nd	nd	nd ^{BS-03}	S4
NGA #210	LAILG-NGA210-2	3/25/12	nd ^{BS-03}	nd	nd	nd	nd	80	nd	nd	nd	2.7 ^{BS-03}	nd ^{BS-03}	nd	nd	nd ^{BS-03}	S4
Duplicate	LAILG-NGA-DUP	3/25/12	nd ^{BS-03}	12	nd	nd	nd	nd	nd	nd	nd	47 ^{BS-03}	130^{BS-03}	nd	nd	nd ^{BS-03}	S4
Equip Blank	LAILG-NGA-EB	3/25/12	nd ^{BS-03}	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BS-03}	nd ^{BS-03}	nd	nd	nd ^{BS-03}	S4
Field Blank	LAILG-NGA- FB	3/25/12	nd ^{BS-03}	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BS-03}	nd ^{BS-03}	40	nd	nd ^{BS-03}	S4
CWIL Limits			nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl ⁽¹⁾	nl	nl	nl	
MDL			0.85	0.79	0.83	0.66	1.9	0.80	0.98	0.98	1.2	0.50	5.0	0.92	2.4	0.93	
RL			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	2.0	10	2.0	

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL Conditional waiver for irrigated lands, order #R4-2005-008
FD Estimated concentration. Field Duplicate RPD >25%

nl not listed

nd not detected

(1) Although no discharge limits were set in the CWIL, the US EPA has set an aquatic life benchmark for this constituent. See Table 8.

E1 The concentration indicated for this analyte is an estimated value above the calibration range.
S4 The surrogate recovery for this sample is outside of established control limits due to possible sample matrix effect.

Q-12 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on the percent recoveries and/or other acceptable QC data.

BS-L The recovery of this analyte in the BS/LCS was below the control limit. Sample result is suspect.
BS-03 The recovery of this analyte in the BS/LCS was outside the control limits. The sample result was accepted based on another acceptable BS/LCS and/or MS and MSD that meet BS criteria.
A-01a Low recovery in BS and high recoveries in both MS/MSD. However, LL-ccv has an acceptable recovery. The batch was accepted since samples were either ND or yielded very high results.

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
PYRETHROID PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Pyrethroid Pesticides												
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Danitol	Deltamethrin	Esfenvalerate	Fenvalerate	Fluvalinate	L-Cyhalothrin	Permethrin	Prallethrin	Resmethrin
NGA #110	LAILG-NGA110-1	1/4/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #189	LAILG-NGA189-1	1/4/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	LAILG-NGA19-3	1/5/08	nd	nd	nd	nd	6.8	nd	nd	nd	nd	nd	nd	nd	nd
NGA #124	LAILG-NGA124-3	1/5/08	nd	581.5	38	nd	1,207.20	66.4	nd	nd	5.5	nd	nd	nd	nd
NGA #183	LAILG-NGA183-4	1/5/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #4	LAILG-NGA4-2	1/23/08	nd	nd	15.8	nd	1,178.40	157.1	nd	nd	13.6	24.5	nd	nd	nd
NGA #53	LAILG-NGA53-2	1/23/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #64	LAILG-NGA64-1	1/23/08	nd	30.2	15.1	nd	2.1	nd	nd	nd	nd	nd	nd	nd	nd
NGA #130	LAILG-NGA130-3	1/24/08	nd	143.4	4.2	nd	33.2	nd	nd	nd	3.8	nd	nd	nd	nd
NGA #182	LAILG-NGA182-2	1/24/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	LAILG-NGA168-4	1/25/08	nd	187.9	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA # 19	LAILG-NGA19-4	8/12/08	nd	nd	nd	nd	82	nd	nd	nd	9.8	nd	nd	nd	nd
NGA # 4	LAILG-NGA 4-3	8/13/08	nd ^{M4}	43.8 ^{M4,Q2,FD}	nd ^{FD}	nd ^{M4}	23,704.6 ^{Q1,Q2,FD}	147.3 ^{M4,Q2,FD}	nd ^{M4}	nd	2,488.1 ^{Q1,FD}	10.6 ^{Q2,FD}	359.3^{Q1,Q2,FD}	nd ^{M4}	nd ^{M4}
Duplicate	LAILG-NGA-DUP	8/13/08	nd	306.5 ^{FD}	4.9 ^{FD}	nd	77368.5 ^{FD}	306.9 ^{FD}	nd	nd	1519.6 ^{FD}	37.5 ^{FD}	1,376.0^{FD}	nd	nd
NGA # 31	LAILG-NGA 31-1	9/23/08	nd	nd	4.3	nd	71.9	nd	nd	nd	nd	2.4 ^{EB}	nd	nd	nd
Duplicate	LAILG-NGA-DUP	9/23/08	nd	nd	4.9	nd	63.6	nd	nd	nd	nd	2.6 ^{EB}	nd	nd	nd
NGA # 19	LAILG-NGA 19-5	11/26/08	nd ^{M4}	34.9 ^{M4}	34.4 ^{M4}	nd ^{M4}	1,813.4 ^{M4}	nd ^{M4}	3.3 ^{M4,Q3}	3.3 ^{M4,Q3,EB}	274.4 ^{M4}	10.2 ^{M4,FB}	62.3^{M4,Q3}	nd	nd ^{M4}
NGA # 210	LAILG-NGA 210-1	11/26/08	nd	134.5	15.6	23.3	92.9	nd	1.8 ^J	4.1 ^{EB}	nd	7.6 ^{FB}	nd	nd	nd
NGA # 184	LAILG-NGA 184-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.1 ^{FB}	nd	nd	nd
Duplicate	LAILG-NGA-DUP	11/26/08	nd	nd	nd	nd	nd	nd	2.0	0.9 ^{EB}	nd	6.0 ^{FB}	nd	nd	nd
NGA # 124	LAILG-NGA 124-4	11/26/08	nd	4,420.1	650.2	nd	121.6	26.6	0.9 ^J	1.0 ^{IEB}	2,309.8	5.9 ^{FB}	nd	nd	nd
NGA # 31	LAILG-NGA 31-2	11/26/08	nd	33.9	23.6	nd	382.1	nd	nd	4.3 ^{EB}	nd	16.3 ^{FB}	nd	nd	nd
NGA # 130	LAILG-NGA 130-4	11/26/08	nd	407.5	nd	nd	180.5	nd	nd	1.5 ^{IEB}	70.0	2.1 ^{FB}	1,096.2	nd	nd
NGA # 150	LAILG-NGA 150-3	11/26/08	nd	8,031.3	nd	nd	nd	nd	3.2	6.4	2,238.7	10.9 ^{FB}	780.0	nd	nd
NGA # 25	LAILG-NGA 25-1	11/26/08	nd	nd	30.1	12.3	0.7 ^{IEB}	nd	nd	nd	nd	89.6 ^{FB}	nd	nd	nd
NGA # 150	LAILG-NGA 150-4	12/15/08	nd	82,902.4	66.3	51.9	34.1	nd	8.4	9.3	6,642.4	nd	2,116.6	nd	nd
NGA # 124	LAILG-NGA 124-5	12/15/08	nd	17,280.2	220.1	nd	346.4	95.7	0.5 ^J	1.4 ^{IEB}	1,234.8	3.9 ^{EB,FB}	98.3	nd	nd
NGA # 189	LAILG-NGA 189-2	12/15/08	nd	nd	nd	nd	0.7 ^J	nd	nd	1.0 ^{IEB}	4.4 ^{EB,FB}	nd	nd	nd	
NGA # 110	LAILG-NGA 110-2	12/15/08	nd	55.2	nd	nd	nd	nd	nd	0.5 ^{IEB}	11.3 ^{EB,FB}	nd	nd	nd	
NGA # 31	LAILG-NGA 31-3	12/15/08	nd	nd	nd	nd	48.5	nd	nd	0.9 ^{IEB}	nd	3.2 ^{EB,FB}	nd	nd	nd
NGA # 184	LAILG-NGA 184-2	12/15/08	nd	26.2	nd	nd	nd	nd	0.5 ^J	2.0 ^{EB}	nd	2.0 ^{EB,FB}	nd	nd	nd
NGA # 130	LAILG-NGA 130-5	12/15/08	nd	101.8	nd	nd	35.6	nd	nd	nd	28.8	nd	210.7	nd	nd
NGA # 178	LAILG-NGA 178-1	12/15/08	nd	nd ^{Q3}	nd	nd	1.4 ^J	nd ^{Q3}	0.8 ^J	1.0 ^{IEB}	nd ^{Q3}	1.7 ^{IEB,FB}	nd	nd ^{M4}	nd ^{M4}
Duplicate	LAILG-NGA-DUP	12/15/08	nd	nd	nd	nd	1.1 ^J	nd	0.6 ^J	1 ^{IEB}	3.0 ^{EB,FB}	nd	nd	nd	
NGA # 64	LAILG-NGA 64-2	12/15/08	nd	81.3	nd	nd	26.9	nd	1.8 ^J	nd	nd	nd	nd	nd	nd
NGA # 168	LAILG-NGA 168-5	12/15/08	nd	1,333.2	31.9	nd	0.8 ^J	nd	nd	nd	9.3 ^{EB,FB}	0.7 ^{IEB,FB}	nd	nd	nd
NGA # 4	LAILG-NGA 4-4	12/15/08	nd	311.5	133.6	133.6	93,137.5	452.3	3.6	nd	1,547	44.5	824.4	nd	nd
CWIL Limits			nl	nl	nl	nl	nl	nl	nl	nl	nl	nl ⁽¹⁾	nl	nl	nl
MDL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5	5
RL			2	2	2	2	2	2	2	2	2	25	2	25	25

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estimated.

CWIL Conditional waiver for irrigated lands, order #R4-2005-0080
EB Estimated concentration, constituent detected at greater than 10% in equipment bla
FD Estimated concentration. Field Duplicate RPD >25%

Q1 Spike or surrogate compound recovery was out of control due to matrix interference. The associated method blank spike or surrogate compound was in control and therefore the sample data was reported without further clarification.

Q2 Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration.

Q3 The sample RPD was out of control. Sample is heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices.

RPD values are not accurate and not applicable because the results for R1 and/or R2 are lower than ten times the MDL.

J Estimated concentration, results above MDL but below RL

(1) Although no discharge limits were set in the CWIL, the US EPA has set an aquatic life benchmark for this constituent. See Table 7.

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
PYRETHROID PESTICIDES
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Pyrethroid Pesticides												
			Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Danitol	Deltamethrin	Esfenvalerate	Fenvalerate	Fluvalinate	L-Cyhalothrin	Permethrin	Prallethrin	Resmethrin
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	21 ^j	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	13.7 ^j	24.2 ^j	nd	465.5	nd	nd	nd	5 ^j	nd	444.9	nd	nd
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	62.2	nd	nd	74.7	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	NGA-#168-LAILG-1	8/13/07	nd	1348.2	19.8 ^j	nd	nd	nd	nd	nd	nd	11.1 ^j	nd	nd	nd
NGA BLANK	NGA LAILG-BLANK-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA FBLI	NGA-LAILG-FBLI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA EQBLI	NGA-LAILG-EQBLI	8/21/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #150	NGA-#150-LAILG	9/25/07	nd	19,426.6	153.4	nd	nd	nd	nd	nd	515.2	nd	5,208.8	nd	nd
NGA #183	ILG-#183	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #183-DUP	ILGNGA-#Dup	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #EQUIP	ILGNGA-#Equip	9/26/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168-2	ILGNGA-#168-2	9/28/07	nd	964	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	1.4 ^j	1.6 ^j	463.1	nd	nd	nd	nd	nd	nd	nd	na
NGA #182	NGA-#182-LAILG-1	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #182-DUP	NGA-Duplicate	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #4	NGA-#4-LAILG-1	12/7/07	nd	10.7	30.6	nd	1,940.5	69	nd	nd	1.6 ^j	55.1	nd	nd	na
NGA #130	NGA-#130-LAILG-2	12/7/07	nd	944.6	14.2	nd	73.5	nd	nd	nd	33.5	nd	327.3	nd	na
NGA #150	NGA-#150-LAILG-2	12/7/07	nd	1,566.7	nd	nd	nd	nd	nd	nd	17.9	nd	237.8	nd	na
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	3,083.4	183.8	nd	150.5	180.3	nd	nd	32.3	3.1	70.9	nd	na
NGA #EQUIP	NGA-equip blank	12/7/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #FIELD	Field Blank-2	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
NGA #176	NGA-#176-LAILG-1	12/18/07	nd	870.5	nd	nd	3.4	nd	nd	nd	nd	nd	nd	nd	na
NGA #183	LAILG-NGA#183-3	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #19	LAILG-NGA#19-2	12/18/07	nd	nd	11.5	nd	449.5	nd	nd	nd	6.6	nd	1,346.4	nd	na
NGA #13	LAILG-NGA#13-1	12/18/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na
NGA #53	LAILG-NGA#53-1	12/18/07	nd	8	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.5	na
CWIL Limits			nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl	nl
MDL			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
RL			2	2	2	2	2	2	2	2	2	2	2	2	2

Concentrations are reported in nanograms per liter (ng/L). Results above CWIL Limits are presented **BOLD**. Footnotes in **BOLD** indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as esti

CWIL

Conditional waiver for irrigated lands, order #R4-2005-008

na

not analyzed

J

Estimated concentration, results above MDL but below RL

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 2 INTERIM
TOXICITY RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum	TIE	
			Survival	Reproduction	Survival	Growth	Growth	Date	Result
NGA #124	LAILG-NGA-124-9	1/9/18	100.00%	N	**	**	**		
NGA #178	LAILG-NGA-178-4	1/9/18	100.00%	N	**	**	**		
NGA #184	LAILG-NGA-184-4	1/9/18	100.00%	N	**	**	**		
NGA #202	LAILG-NGA-202-2	1/9/18	100.00%	N	**	**	**		
NGA #4	LAILG-NGA-4-9	3/22/18	0.00%	Y	**	**	**		
NGA #19	LAILG-NGA-19-9	3/22/18	100.00%	N	**	**	**		
NGA #64	LAILG-NGA-64-5	3/22/18	80.00%	N	**	**	**		
NGA #168	LAILG-NGA-168-9	3/22/18	100.00%	N	**	**	**		

**

not analyzed, not most sensitive species

Y

significantly different from control group

N

no significant difference between control group

P

partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a successful TIE (Typically needs a TUc of greater than 2).

NR

not required

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 1 INTERIM
TOXICITY RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum	TIE	
			Survival	Reproduction	Survival	Growth		Date	Result
NGA #4	LAILG-NGA-4-8	1/20/17	0.00%	Y	21.60%	Y	Y	2/15/17	Suspended solids or particle bound toxicants
NGA #19	LAILG-NGA-19-8	1/20/17	100.00%	N	100.00%	N	N		
NGA #176	LAILG-NGA-176-3	1/20/17	100.00%	N	100.00%	N	N		
NGA #124	LAILG-NGA-124-8	2/17/17	100.00%	N	100.00%	N	P		
NGA #150	LAILG-NGA-150-7	2/17/17	0.00%	Y	100.00%	N	P		
NGA #158	LAILG-NGA-158-1	2/17/17	100.00%	N	100.00%	N	P		
NGA #178	LAILG-NGA-178-3	2/17/17	100.00%	N	100.00%	N	N		
NGA #202	LAILG-NGA- 202-1	2/17/17	100.00%	N	100.00%	N	P		

Y significantly different from control group

N no significant difference between control group

P partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a successful TIE (Typically needs a TUc of greater than 2).

NR not required

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 5 CONTINUATION
TOXICITY RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum	TIE	
			Survival	Reproduction	Survival	Growth		Date	Result
NGA #64	LAILG-NGA-64-4	1/5/16	100.00%	N	100.00%	N	N		
NGA #168	LAILG-NGA-168-8	1/5/16	100.00%	N	100.00%	N	Y		No TIE, IC50 > 50% for Selenastrum (75.35%)

Y significantly different from control group
 N no significant difference between control group
 P partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a successful TIE (Typically needs a TUc of greater than 2).
 NR not required

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 4
TOXICITY RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum	TIE		
			Survival	Reproduction	Survival	Growth		Growth	Date	Result
NGA #150	LAILG-NGA-150-6	12/2/14	100.00%	P	100.00%	N	Y			No TIE, IC50 > 50% for Selenastrum (>100%)
NGA #188	LAILG-NGA-188-1	12/2/14	100.00%	N	100.00%	N	N			
NGA #168	LAILG-NGA-168-7	5/15/15	100.00%	N	100.00%	N	N			

Y significantly different from control group

N no significant difference between control group

P partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a successful TIE (Typically needs a TUc of greater than 2).

NR not required

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 3
TOXICITY RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum	TIE		
			Survival	Reproduction	Survival	Growth		Date	Result	
NGA #19	LAILG-NGA19-7	2/28/14	100.00%	N	100.00%	N	Y		No TIE, IC50 > 50% for Selenastrum (87.03%)	
NGA #26	LAILG-NGA26-1	2/28/14	100.00%	N	100.00%	N	N			
NGA #124	LAILG-NGA124-7	2/28/14	100.00%	N	100.00%	N	Y		No TIE, IC50 > 50% for Selenastrum (>100%)	
NGA #178	LAILG-NGA178-2	2/28/14	100.00%	N	100.00%	N	Y		No TIE, IC50 > 50% for Selenastrum (97.98%)	
NGA #184	LAILG-NGA184-3	2/28/14	100.00%	N	100.00%	N	Y		No TIE, IC50 > 50% for Selenastrum (>100%)	

Y significantly different from control group

N no significant difference between control group

P partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a successful TIE (Typically needs a TUc of greater than 2).

NR not required

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 1
TOXICITY RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum	TIE		
			Survival	Reproduction	Survival	Growth		Date	Result	
NGA #4	LAILG-NGA4-5	3/21/11	0.00%	Y	15.00%	Y	Y	3/27/12	Non-polar organics and organophosphates	
NGA #124	LAILG-NGA124-6	3/21/11	90.00%	N	100.00%	N	N			
NGA # 150	LAILG-NGA 150-5	3/21/11	100.00%	N	100.00%	N	Y	3/27/12	Organophosphates	
NGA #19	LAILG-NGA19-6	3/23/11	100.00%	Y	0.00%	Y	Y	3/27/12	TIE was initiated, did not show an observed effect	
NGA #168	LAILG-NGA168-6	3/17/12	100.00%	N	95.00%	N	N			
NGA #31	LAILG-NGA31-4	3/17/12	70.00%	Y	90.00%	N	Y	3/24/12	Non-polar organic compounds and metals	
NGA #162	LAILG-NGA162-1	3/17/12	100.00%	N	96.67%	N	N			
NGA #64	LAILG-NGA64-3	3/17/12	90.00%	N	100.00%	N	N			

Y significantly different from control group

N no significant difference between control group

P partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a successful TIE (Typically needs a TUc of greater than 2).

NR not required

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
TOXICITY RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum		TIE	
			Survival	Reproduction	Survival	Growth	Growth		Date	Result
NGA #110	LAILG-NGA110-1	1/4/08	90.00%	N	80.00%	N	N			
NGA #189	LAILG-NGA189-1	1/4/08	100.00%	N	91.67%	N	Y			
NGA #19	LAILG-NGA19-3	1/5/08	TIE initiated based in results from sample LAILG-NGA#19-2						1/8/08	TIE was initiated, did not show an observed effect
NGA #124	LAILG-NGA124-3	1/5/08	TIE initiated based in results from sample NGA #124-LAILG-2						1/8/08	TIE was initiated, did not show an observed effect
NGA #4	LAILG-NGA4-2	1/23/08	TIE initiated based in results from sample NGA #4-LAILG-1						1/24/08	Non-polar organic compounds
NGA #53	LAILG-NGA53-2	1/23/08	TIE initiated based in results from sample NGA #53-LAILG-1						1/24/08	TIE was initiated, did not show an observed effect
NGA #64	LAILG-NGA64-1	1/23/08	100.00%	Y	91.67%	N	N			
NGA #182	LAILG-NGA182-2	1/23/08	TIE initiated based in results from sample NGA #182-LAILG-1						1/24/08	TIE was initiated, did not show an observed effect
NGA #19	LAILG-NGA 19-4	8/12/08	90.00%	N	NR		NR			
NGA # 4	LAILG-NGA 4-3	8/13/08	0.00%	Y	NR		NR		8/26/08	Non-polar organics and particulate-bound toxicants
NGA # 31	LAILG-NGA 31-1	9/23/08	20.00%	Y	NR		NR			
NGA # 19	LAILG-NGA19-5	11/26/08	70.00%	Y	NR		NR			
NGA # 210	LAILG-NGA 210-1	11/26/08	90.00%	P	98.33%	N	N			
NGA # 184	LAILG-NGA 184-1	11/26/08	80.00%	P	100.00%	N	N			
NGA # 124	LAILG-NGA 124-4	11/26/08	0.00%	Y	NR		NR		12/9/08	Volatile compounds
NGA #31	LAILG-NGA 31-2	11/26/08	80.00%	N	98.33%	N	P			
NGA # 130	LAILG-NGA 130-4	11/26/08	NR		NR		N			
NGA # 150	LAILG-NGA 150-3	11/26/08	NR		NR		P			
NGA # 25	LAILG-NGA 25-1	11/26/08	80.00%	Y	100.00%	N	N			
NGA # 124	LAILG-NGA 124-5	12/15/08	0.00%	Y	NR		NR		12/16/08	TIE was initiated, did not show an observed effect
NGA # 189	LAILG-NGA 189-2	12/15/08	NR		NR		Y		1/15/09	Particulate Bound toxicants and OP compounds
NGA # 110	LAILG-NGA 110-2	12/15/08	90.00%	N	NR		NR			
NGA # 178	LAILG-NGA 178-1	12/15/08	100.00%	N	100.00%	N	N			
NGA # 64	LAILG-NGA 64-2	12/15/08	90.00%	P	NR		NR			
NGA # 168	LAILG-NGA 168-5	12/15/08	90.00%	P	NR		NR			
NGA # 4	LAILG-NGA 4-4	12/15/08	0.00%	Y	NR		NR		12/16/08	Metals,copper,cadmium,zink,manganese,lead, and nickle

Y

significantly different from control group

N

no significant difference between control group

P

partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a successful TIE (Typically needs a TUC of greater than 2).

NR

not required

SUMMARY OF HISTORICAL SAMPLES COLLECTED UNDER CWIL ORDER R4-2005-0080
TOXICITY RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample #	Date	Ceriodaphnia		Fathead Minnow		Selenastrum	TIE		
			Survival	Reproduction	Survival	Growth		Date	Result	
NGA #130	NGA-#130-LAILG-1	8/6/07	100.00%	N	93.33%	N	Y			ns
NGA #183	NGA-#183-LAILG-1	8/6/07	100.00%	N	93.33%	N	N			
NGA #19	NGA-#19-LAILG-1	8/13/07	80.00%	N	98.30%	N	N			
NGA #124	NGA-#124-LAILG-1	8/13/07	100.00%	N	98.30%	N	N			
NGA #168	NGA-#168-LAILG-1	8/13/07	0.00%	Y	98.30%	N	Y	9/28/08	100% survival	
NGA #150	NGA-#150-LAILG	9/25/07	0.00%	Y	98.33%	N	Y			ns
NGA #168	NGA-#168-LAILG-3	11/30/07	100.00%	N	100.00%	N	N			
NGA #182	NGA #182-LAILG-1	12/7/07	0.00%	Y	98.33%	N	Y			ns
NGA #4	NGA #4-LAILG-1	12/7/07	0.00%	Y	40.00%	Y	Y			ns
NGA #130	NGA #130-LAILG-2	12/7/07	100.00%	N	98.33%	N	N			
NGA #150	NGA #150-LAILG-2	12/7/07	100.00%	N	98.33%	N	Y			ns
NGA #124	NGA-#124-LAILG-2	12/7/07	0.00%	Y	100.00%	N	Y			ns
NGA #176	NGA-#176-LAILG-1	12/18/07	100.00%	N	100.00%	N	N			
NGA #183	LAILG-NGA#183-3	12/18/07	100.00%	N	100.00%	N	N			
NGA #19	LAILG-NGA#19-2	12/18/07	50.00%	Y	100.00%	N	N			ns
NGA #13	LAILG-NGA#13-1	12/18/07	10.00%	Y	21.67%	Y	N			ns
NGA #53	LAILG-NGA#53-1	12/18/07	100.00%	N	81.67%	N	N			

Y

Significantly different from control group

N

No significant difference between control group

ns

not enough runoff for follow up sample

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 1
FIELD MONITORING RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample ID	Date	Sample Type	Time (24hr)	*Approximate Flow Cross Section (ft ²)	Flow (ft/s)	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
NGA #4	LAILG-NGA#4-5	3/21/11	Bucket	10:40	0.1250	0.01	11.0	9.81	43	na*	85
				10:44		0.01	11.1	9.64	25	na*	181
				10:50		0.01	11.2	9.29	25	na*	197
NGA #124	LAILG-NGA#124-6	3/21/11	Bucket	8:00	nm	9	10.4	7.89	292	na*	54.9
				8:05		11	10.5	7.82	282	na*	49.7
				8:10		13	10.5	7.87	268	na*	16.8
NGA #150	LAILG-NGA#150-5	3/21/11	Bucket	10:47	0.0185	4	15.4	6.70	1170	na*	34.7
				10:49		4	16.0	6.61	1127	na*	33.7
				10:50		5	15.9	6.59	1163	na*	38.0
NGA #19	LAILG-NGA#19-6	3/23/11	Grab	16:58	nm	nm	13.9	8.88	1.32	na*	999
				17:00		nm	14.2	8.83	1.05	na*	999
				17:02		nm	12.6	8.87	1.19	na*	999
NGA #31	LAILG-NGA#31-4	3/17/12	Grab	14:30	0.6042	0.88	13.83	7.73	99.9	9.33	220
				14:34		0.84	13.63	7.75	99.9	8.77	174
				14:38		0.94	13.44	7.95	98.6	8.51	181
NGA #64	LAILG-NGA#64-3	3/17/12	Grab	9:50	0.0833	1.3	14.7	5.5	14.3	10.48	352
				9:53		1.2	14.5	4.9	9.4	10.58	623
				9:58		1.3	14.5	5.2	4.2	10.43	179
NGA #162	LAILG-NGA#162-1	3/17/12	Grab	13:00	nm	nm	13.37	6.94	66.2	10.67	3.3
				13:02		nm	13.42	7.24	65.9	10.33	1.6
				13:05		nm	13.32	7.46	66.1	9.93	1.2
NGA #168	LAILG-NGA#168-6	3/17/12	Grab	11:15	0.0556	0.71	13.78	6.1	84.5	10.68	>800
				11:18		0.52	13.83	6.8	85.9	10.05	>800
				11:21		0.71	13.77	7.1	82.2	9.62	>800
NGA #4	LAILG-NGA#4-6	3/25/12	Pump	12:50	No flow measurements due to access restrictions		16.21	5.63	43.7	8.52	44.9
				12:52			16.31	5.74	39.3	8.58	35.7
				12:54			15.95	5.89	37.1	8.89	42.9

* Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is $2/3 * \text{width} * \text{depth}$

ft/s feet per second

mg/L milligrams per liter

°C degrees celcius

NTU Nephelometric Turbidity Units

uS microsiemens

na* Not analyzed, DO meter was not functioning properly at the time of field sampling

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 1
FIELD MONITORING RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample ID	Date	Sample Type	Time (24hr)	*Approximate Flow Cross Section (ft ²)	Flow (ft/s)	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
NGA #170	LAILG-NGA#170-1	3/25/12	Grab	14:35	nm	nm	13.81	6.18	25.8	10.59	512
				14:37		nm	13.98	6.32	22.1	10.23	452
				14:40		nm	13.73	6.27	19.8	10.31	446
NGA #176	LAILG-NGA#176-2	3/25/12	Grab	15:15	nm	nm	13.17	6.49	39.7	10.69	>800
				15:17		nm	13.16	6.63	38.4	10.41	>800
				15:21		nm	12.73	6.44	40.2	10.69	>800
NGA #210	LAILG-NGA#210-2	3/25/12	Grab	17:45	nm	nm	13.21	7.22	0.129	10.55	5.8
				17:47		nm	13.35	7.75	0.130	10.40	3.8
				17:50		nm	13.88	7.93	0.133	10.24	5.5

* Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is $2/3 \times \text{width} \times \text{depth}$
 ft/s feet per second mg/L milligrams per liter
 °C degrees celcius NTU Nephelometric Turbidity Units
 uS microsiemens nm not monitored

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 3
FIELD MONITORING RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample ID	Date	Sample Type	Time (24hr)	*Approximate Flow Cross	Flow (ft/s)	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen	Turbidity (NTU)
NGA #19	LAILG-NGA19-7	2/28/14	Bucket	6:11	nm	nm	12.4	7.92	1114	9.08	815
				6:12		nm	12.3	7.98	1152	9.52	820
				6:13		nm	12.4	7.87	1112	9.61	810
NGA #26	LAILG-NGA26-1	2/28/14	Bucket	9:01	nm	nm	14.8	7.77	1081	7.84	212
				9:02		nm	14.7	7.82	1057	7.95	225
				9:03		nm	14.7	7.83	1072	7.88	220
NGA #124	LAILG-NGA124-7	2/28/14	Bucket	11:22	nm	nm	14.7	7.65	894	9.10	475
				11:23		nm	14.6	7.50	910	9.01	450
				11:24		nm	14.7	7.51	915	8.80	482
NGA #178	LAILG-NGA178-2	2/28/14	Bucket	10:00	nm	nm	15.0	7.88	928	10.15	468
				10:01		nm	14.9	7.92	952	10.28	472
				10:02		nm	15.0	7.81	943	10.21	490
NGA #184	LAILG-NGA184-3	2/28/14	Bucket	7:10	nm	nm	14.7	8.01	1213	8.11	512
				7:11		nm	14.6	8.10	1219	8.23	552
				7:12		nm	14.6	7.93	1242	8.15	495

* Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is $2/3 * \text{width} * \text{depth}$.

ft/s feet per second mg/L milligrams per liter

°C degrees celcius NTU Nephelometric Turbidity Units

uS microsiemens

na* Not analyzed, DO meter was not functioning properly at the time of field sampling

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 4
FIELD MONITORING RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample ID	Date	Sample Type	Time (24hr)	*Approximate Flow Cross	Flow (ft/s)	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen	Turbidity (NTU)
NGA #150	LAILG-NGA150-6	12/2/14	Grab	8:00	nm	nm	14.8	9.31	460	9.40	150
				8:15		nm	14.8	9.50	450	9.30	130
				8:20		nm	14.9	8.94	440	10.50	180
NGA #168	LAILG-NGA168-7	5/15/15	Bucket	11:20	nm	nm	16.6	7.35	663	9.87	76
				11:22		nm	16.5	7.44	651	9.47	90
				11:23		nm	16.4	7.5	689	9.72	102
NGA #188	LAILG-NGA188-1	12/2/14	Grab	13:55	nm	nm	13.9	8.83	399	8.00	900
				14:05		nm	14.1	8.70	382	7.80	800
				14:10		nm	14.1	8.56	393	8.50	630

* Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is $2/3 \times \text{width} \times \text{depth}$.
 ft/s feet per second mg/L milligrams per liter
 °C degrees celcius NTU Nephelometric Turbidity Units
 uS microsiemens
 na* Not analyzed, DO meter was not functioning properly at the time of field sampling

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2010-0186 YEAR 5 CONTINUATION
FIELD MONITORING RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample ID	Date	Sample Type	Time (24hr)	*Approximate Flow Cross	Flow (ft/s)	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen	Turbidity (NTU)
NGA #64	LAILG-NGA-64-4	1/15/16	Bucket	8:30	nm	nm	13.2	9.00	85	13.00	58
				8:40		nm	13.0	8.80	63	12.62	66
				8:42		nm	12.9	8.27	80	12.37	113
NGA #168	LAILG-NGA168-8	1/15/16	Bucket	9:15	nm	nm	12.59	8.12	568	12.93	244
				9:45		nm	12.53	8.14	603	12.49	286
				9:47		nm	12.42	7.96	646	12.62	288

* Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is $2/3 \times \text{width} \times \text{depth}$.

ft/s feet per second mg/L milligrams per liter

°C degrees celcius NTU Nephelometric Turbidity Units

uS microsiemens

na* Not analyzed, DO meter was not functioning properly at the time of field sampling

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 1 INTERIM
FIELD MONITORING RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample ID	Date	Sample Type	Time (24hr)	*Approximate Flow Cross	Flow (ft/s)	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen	Turbidity (NTU)
NGA #4	LAILG-NGA-4-8	1/20/17	Bucket	13:45	nm	nm	13.76	8.37	76	5.67	35.9
				14:05		nm	13.99	7.66	57	8.34	31.8
				nm		nm	nm	nm	nm	nm	nm
NG#19	LAILG-NGA19-8	1/20/17	Bucket	8:03	nm	nm	7.56	9.01	884	8.08	1000
				8:25		nm	7.54	9.06	882	8.08	1000
				8:40		nm	8.24	8.12	741	6.19	1000
NGA#176	LAILG-NGA-176-3	1/20/17	Bucket	12:00	nm	nm	10.69	8.54	123	13.93	641
				12:30		nm	11.31	8.07	159	7.51	738
				nm		nm	nm	nm	nm	nm	nm
NGA #124	LAILG-NGA-124-8	2/17/17	Bucket	14:45	est. 10 gal/sec	12.97	7.92	209	14.88	847	
				14:50		12.96	8.16	431	17.56	825	
				14:55		12.98	7.98	309	18.91	832	
NGA #150	LAILG-NGA150-7	2/17/17	Bucket	16:10	nm	12.99	7.53	325	6.44	70.1	
				16:15		13.03	7.44	324	8.84	48.4	
				16:20		13.04	7.34	267	10.31	42.6	
NGA #158	LAILG-NGA-158-1	2/17/17	Bucket	14:03	est. 1 gal/sec	12.45	8.76	413	13.21	70.9	
				14:13		12.98	8.14	73	21.37	51.8	
				14:27		12.84	8.09	213	18.64	46.4	
NGA #178	LAILG-NGA178-3	2/17/17	Bucket	12:40	est. 1 gal/sec	11.97	8.25	893	na	1000+	
				12:43		11.99	8.12	903	na	1000+	
				12:48		11.98	8.06	894	na	1000+	
NGA #202	LAILG-NGA202-1	2/17/17	Bucket	15:10	est. 15 gal/sec	12.86	8.18	131	12.93	122	
				15:15		12.85	8.17	129	12.80	116	
				15:20		12.85	8.14	127	10.01	108	

* Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is $2/3 \times \text{width} \times \text{depth}$.

ft/s feet per second mg/L milligrams per liter

°C degrees celcius NTU Nephelometric Turbidity Units

uS microsiemens

na* Not analyzed, DO meter was not functioning properly at the time of field sampling

SUMMARY OF SAMPLES COLLECTED - CWIL ORDER R4-2016-0143 YEAR 2 INTERIM
FIELD MONITORING RESULTS
NURSERY GROWERS ASSOCIATION
LOS ANGELES IRRIGATED LANDS GROUP

Site	Sample ID	Date	Sample Type	Time (24hr)	*Approximate Flow Cross	Flow (ft/s)	Temperature (°C)	pH	E.C. (uS)	Dissolved Oxygen	Turbidity (NTU)
NGA #124	LAILG-NGA-124-9	1/9/18	Bucket	8:30	18"	2.00	13.74	7.77	1.130	30.30	339
				8:35		2.00	13.75	7.80	1.190	nm	325
				8:40		2.00	13.75	7.80	1.200	nm	330
NG#178	LAILG-NGA-178-4	1/9/18	Bucket	6:45	20"	2.00	12.02	8.07	0.743	31.07	1000+
				6:50		2.00	12.00	8.15	0.750	nm	1000+
				6:55		2.00	12.00	8.10	0.750	nm	1000+
NG#184	LAILG-NGA-184-4	1/9/18	Bucket	5:35	est. 3 gal/sec	11.75	7.89	0.399	27.23	1000+	
				5:40		11.80	7.75	0.398	nm	1000+	
				5:45		11.79	7.79	0.395	nm	1000+	
NGA#202	LAILG-NGA-202-2	1/9/18	Bucket	11:30	6"	0.25	16.06	8.36	0.431	20.61	230
				11:35		0.25	16.10	8.30	0.425	nm	169
				1:40		0.25	16.11	8.40	0.430	nm	175
NGA #4	LAILG-NGA-4-9	3/22/18	Bucket	11:00	24"	1.00	15.86	7.76	0.056	17.89	220
				11:05		1.00	15.99	7.76	0.055	17.38	206
				11:10		1.00	16.16	7.85	0.051	16.19	192
NGA #19	LAILG-NGA-19-9	3/22/18	Bucket	8:10	10"	2.00	14.05	6.88	1.31	31.18	743
				8:15		2.00	14.08	6.89	1.32	31.17	738
				8:20		2.00	14.12	6.89	1.30	31.15	732
NGA #64	LAILG-NGA-64-5	3/22/18	Bucket	11:45	12"	0.50	17.46	8.80	0.084	24.32	43.9
				11:50		0.50	18.11	9.13	0.057	15.87	25.8
				11:55		0.50	18.09	9.17	0.07	15.79	59.6
NGA #168	LAILG-NGA-168-9	3/22/18	Bucket	13:00	4"	0.50	16.87	9.17	0.674	17.76	92.7
				13:05		0.50	16.84	9.24	0.680	16.89	90.1
				13:10		0.50	16.80	9.27	0.679	16.23	84.3

* Runoff streams were assumed to have a parabolic shape unless field measurements indicated otherwise. The cross sectional area of a parabola is $2/3 \times \text{width} \times \text{depth}$.

ft/s feet per second mg/L milligrams per liter

°C degrees celcius NTU Nephelometric Turbidity Units

uS microsiemens

na* Not analyzed, DO meter was not functioning properly at the time of field sampling

APPENDIX C

LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY DOCUMENTATION

W
L

Weck Laboratories, Inc.

Analytical Laboratory Services - Since 1964

CHAIN OF CUSTODY RECORD

14859 East Clark Avenue : Industry : CA 91745
Tel 626-336-2139 ♦ Fax 626-336-2634 ♦ www.wecklabs.com

CLIENT NAME:

Pacific Ridgeline
ADDRESS:

1891 Goodyear Ave., Suite 621
Ventura, CA 93003

PROJECT:

Bryn Home



WECK LABORATORIES, INC.

Work Orders: 8A09125

Certificate of Analysis

FINAL REPORT

2/13/2018

Received Date: 1/9/2018

Turnaround Time: Normal

Phones: (805) 933-1770

Fax:

P.O. #:

Billing Code:

Attn: Scott Jordan

Client: Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

DoD-ELAP #L2457 • ELAP-CA #1132 • EPA-UCMR #CA00211 • Guam-EPA #17-008R • ISO 17025 #L2457.01 • LACSD #10143 •
NJ-DEP #CA015

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Scott Jordan,

Enclosed are the results of analyses for samples received 1/09/18 with the Chain-of-Custody document. The samples were received in good condition, at 8.9 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanakit
Project Manager



8A09125

Page 1 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
LAILG-NGA-184-4	Scott Jordan	8A09125-01	Water	01/09/18 05:35	
LAILG-NGA-178-4	Scott Jordan	8A09125-02	Water	01/09/18 06:45	
LAILG-NGA-124-9	Scott Jordan	8A09125-03	Water	01/09/18 08:30	
LAILG-NGA-202-2	Scott Jordan	8A09125-04	Water	01/09/18 11:30	

Not Certified Analyses Summary

EPA 8270M in Water		
Analyte	CAS #	Not Accredited By
Dichloran	99-30-9	NELAP
Tefluthrin	79538-32-2	NELAP
Pendimethalin	40487-42-1	NELAP
Allethrin	584-79-2	NELAP
Prallethrin	23031-36-9	NELAP
Bifenthrin	82657-04-3	NELAP
Sumithrin (Phenothrin)	26002-80-2	NELAP
L-Cyhalothrin	91465-08-6	NELAP
Permethrin	52645-53-1	NELAP
Cyfluthrin	68359-37-5	NELAP
Cypermethrin	52315-07-8	NELAP
Fenvalerate/Esfenvalerate	51630-58-1	NELAP
Deltamethrin/Tralomethrin	52820-00-5	NELAP
Fenpropathrin (Danitol)	39515-41-8	NELAP
Triphenyl phosphate	115-86-6	NELAP
Perylene-d12	1520-96-3	NELAP



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Sample Results

Sample: LAILG-NGA-184-4
8A09125-01 (Water) Sampled: 01/09/18 5:35 by Scott Jordan

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0	Batch ID: W8A0694	Instr: LC12	Prepared: 01/12/18 08:45		Analyst: jan	
Chloride, Total	23	0.50	mg/l	1	01/12/18 21:37	
Sulfate as SO ₄	61	0.50	mg/l	1	01/12/18 21:37	
Chlorinated Pesticides and/or PCBs by GC/ECD						
Method: EPA 608	Batch ID: W8A0588	Instr: GC07	Prepared: 01/11/18 08:32		Analyst: rmr	
2,4'-DDD	ND	25	ng/l	5	01/19/18 02:26	M-04
2,4'-DDE	ND	25	ng/l	5	01/19/18 02:26	M-04
2,4'-DDT	ND	25	ng/l	5	01/19/18 02:26	M-04
4,4'-DDD	ND	25	ng/l	5	01/19/18 02:26	M-04
4,4'-DDE	ND	25	ng/l	5	01/19/18 02:26	M-04
4,4'-DDT	ND	25	ng/l	5	01/19/18 02:26	M-04
Aldrin	ND	25	ng/l	5	01/19/18 02:26	M-04
alpha-BHC	ND	25	ng/l	5	01/19/18 02:26	M-04
alpha-Chlordane	ND	25	ng/l	5	01/19/18 02:26	M-04
Aroclor 1016	ND	2000	ng/l	20	01/24/18 19:23	M-04
Aroclor 1221	ND	2000	ng/l	20	01/24/18 19:23	M-04
Aroclor 1232	ND	2000	ng/l	20	01/24/18 19:23	M-04
Aroclor 1242	ND	2000	ng/l	20	01/24/18 19:23	M-04
Aroclor 1248	ND	2000	ng/l	20	01/24/18 19:23	M-04
Aroclor 1254	ND	2000	ng/l	20	01/24/18 19:23	M-04
Aroclor 1260	ND	2000	ng/l	20	01/24/18 19:23	M-04
beta-BHC	ND	25	ng/l	5	01/19/18 02:26	M-04
Chlordane (tech)	ND	500	ng/l	5	01/19/18 02:26	M-04
cis-Nonachlor	ND	25	ng/l	5	01/19/18 02:26	M-04
delta-BHC	ND	25	ng/l	5	01/19/18 02:26	M-04
Dieldrin	ND	25	ng/l	5	01/19/18 02:26	M-04
Endosulfan I	ND	25	ng/l	5	01/19/18 02:26	M-04
Endosulfan II	ND	25	ng/l	5	01/19/18 02:26	M-04
Endosulfan sulfate	ND	25	ng/l	5	01/19/18 02:26	M-04
Endrin	ND	25	ng/l	5	01/19/18 02:26	M-04
Endrin aldehyde	ND	25	ng/l	5	01/19/18 02:26	M-04
gamma-BHC (Lindane)	ND	25	ng/l	5	01/19/18 02:26	M-04
gamma-Chlordane	ND	25	ng/l	5	01/19/18 02:26	M-04
Heptachlor	ND	25	ng/l	5	01/19/18 02:26	M-04
Heptachlor epoxide	ND	25	ng/l	5	01/19/18 02:26	M-04
Methoxychlor	ND	25	ng/l	5	01/19/18 02:26	M-04
Mirex	ND	25	ng/l	5	01/19/18 02:26	M-04

8A09125

Page 3 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-184-4						Sampled: 01/09/18 5:35 by Scott Jordan
	8A09125-01 (Water)					(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Method: EPA 608	Batch ID: W8A0588	Instr: GC07	Prepared: 01/11/18 08:32		Analyst: rmr	
Toxaphene		ND	2500	ng/l	5	01/19/18 02:26
trans-Nonachlor		ND	25	ng/l	5	01/19/18 02:26
Surrogate(s)						
Decachlorobiphenyl		24%	Conc: 23.7	34-125		01/19/18 02:26
Tetrachloro-meta-xylene		45%	Conc: 45.2	35-111		01/19/18 02:26

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 350.1	Batch ID: W8A0652	Instr: AA06	Prepared: 01/11/18 16:06		Analyst: mnq	
Ammonia as N		7.4	1.0	mg/l	10	01/13/18 19:51
Method: EPA 353.2	Batch ID: W8A0497	Instr: AA01	Prepared: 01/10/18 09:52		Analyst: nat	
NO ₂ +NO ₃ as N		1300	200	ug/l	1	01/10/18 14:48
Method: EPA 365.1	Batch ID: W8A0460	Instr: AA01	Prepared: 01/09/18 18:29		Analyst: nat	
o-Phosphate as P		1.5	0.050	mg/l	25	01/09/18 19:38
Method: EPA 365.1	Batch ID: W8A0461	Instr: AA01	Prepared: 01/09/18 18:31		Analyst: nat	
o-Phosphate as P, dissolved		1500	50	ug/l	25	01/09/18 19:59
Method: EPA 365.1	Batch ID: W8A0773	Instr: AA01	Prepared: 01/12/18 16:54		Analyst: nat	
Phosphorus, Dissolved		1.7	0.10	mg/l	2	01/15/18 18:37
Method: EPA 365.1	Batch ID: W8A0894	Instr: AA01	Prepared: 01/16/18 13:14		Analyst: nat	
Phosphorus as P, Total		10	2.5	mg/l	25	01/22/18 17:36
Method: SM 2540C	Batch ID: W8A0520	Instr: OVEN01	Prepared: 01/10/18 12:07		Analyst: ymt	
Total Dissolved Solids		240	10	mg/l	1	01/14/18 21:48
Method: SM 2540D	Batch ID: W8A0663	Instr: OVEN11	Prepared: 01/11/18 18:04		Analyst: ajk	
Total Suspended Solids		230	5	mg/l	1	01/11/18 19:05

Metals by EPA 200 Series Methods

Method: EPA 200.7	Batch ID: [CALC]	Instr: [CALC]	Prepared: 01/11/18 17:33		Analyst: JCK	
Calcium Hardness as CaCO ₃		104	0.250	mg/l	1	01/15/18 14:49
Method: EPA 200.7	Batch ID: W8A0658	Instr: ICP03	Prepared: 01/11/18 17:33		Analyst: JCK	
Calcium, Total		41.8	0.100	mg/l	1	01/15/18 14:49
Method: EPA 200.8	Batch ID: W8A0660	Instr: ICPMS04	Prepared: 01/11/18 17:37		Analyst: rrl	
Copper, Total		110	0.50	ug/l	1	01/15/18 18:51

Pyrethroid Pesticides by EPA 8270M

Method: EPA 8270M	Batch ID: W8A0893	Instr: GCMS15	Prepared: 01/15/18 16:31		Analyst: EFC	
Allethrin		ND	10	ng/l	5	01/30/18 01:03
Bifenthrin		19	10	ng/l	5	01/30/18 01:03
Cyfluthrin		ND	10	ng/l	5	01/30/18 01:03
Cypermethrin		ND	10	ng/l	5	01/30/18 01:03
Deltamethrin/Tra洛methrin		ND	10	ng/l	5	01/30/18 01:03



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-184-4	Sampled: 01/09/18 5:35 by Scott Jordan
8A09125-01 (Water)	(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Pyrethroid Pesticides by EPA 8270M (Continued)						
Method: EPA 8270M	Batch ID: W8A0893	Instr: GCMS15	Prepared: 01/15/18 16:31		Analyst: EFC	
Dichloran	ND	10	ng/l	5	01/30/18 01:03	M-04
Fenpropathrin (Danitol)	ND	10	ng/l	5	01/30/18 01:03	M-04
Fenvalerate/Esfenvalerate	ND	10	ng/l	5	01/30/18 01:03	M-04
L-Cyhalothrin	ND	10	ng/l	5	01/30/18 01:03	M-04
Pendimethalin	290	10	ng/l	5	01/30/18 01:03	M-04
Permethrin	43	25	ng/l	5	01/30/18 01:03	M-04
Prallethrin	ND	10	ng/l	5	01/30/18 01:03	M-04
Sumithrin (Phenothrin)	ND	50	ng/l	5	01/30/18 01:03	M-04
Tefluthrin	ND	10	ng/l	5	01/30/18 01:03	M-04
<i>Surrogate(s)</i>						
<i>Perylene-d12</i>	50%	Conc: 126	2-205		01/30/18 01:03	M-04
<i>Triphenyl phosphate</i>	100%	Conc: 250	6-222		01/30/18 01:03	M-04

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 525.2M	Batch ID: W8A1020	Instr: GCMS13	Prepared: 01/17/18 09:22	Analyst: EFC
Azinphos methyl (Guthion)	ND	10	ng/l	1 02/02/18 19:50
Bolstar	ND	10	ng/l	1 02/02/18 19:50
Chlorpyrifos	ND	10	ng/l	1 02/02/18 19:50
Coumaphos	ND	10	ng/l	1 02/02/18 19:50
Demeton-o	ND	10	ng/l	1 02/02/18 19:50
Demeton-s	ND	10	ng/l	1 02/02/18 19:50
Diazinon	ND	10	ng/l	1 02/02/18 19:50
Dichlorvos	ND	10	ng/l	1 02/02/18 19:50
Dimethoate	ND	10	ng/l	1 02/06/18 15:57
Disulfoton	ND	10	ng/l	1 02/02/18 19:50
Ethoprop	ND	10	ng/l	1 02/02/18 19:50
Ethyl parathion	ND	10	ng/l	1 02/02/18 19:50
Fensulfothion	ND	10	ng/l	1 02/02/18 19:50
Fenthion	ND	10	ng/l	1 02/02/18 19:50
Malathion	ND	10	ng/l	1 02/02/18 19:50
Merphos	ND	10	ng/l	1 02/02/18 19:50
Methyl parathion	ND	10	ng/l	1 02/02/18 19:50
Mevinphos	ND	10	ng/l	1 02/02/18 19:50
Naled	ND	10	ng/l	1 02/02/18 19:50
Phorate	ND	10	ng/l	1 02/02/18 19:50
Ronnel	ND	10	ng/l	1 02/02/18 19:50
Stirophos	ND	10	ng/l	1 02/02/18 19:50
Tokuthion (Prothifos)	ND	10	ng/l	1 02/02/18 19:50

8A09125

Page 5 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Sample Results

(Continued)

Sample: LAILG-NGA-184-4 Sampled: 01/09/18 5:35 by Scott Jordan
8A09125-01 (Water) (Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)						
Method: EPA 525.2M	Batch ID: W8A1020	Instr: GCMS13	Prepared: 01/17/18 09:22		Analyst: EFC	
Trichloronate	ND	10	ng/l	1	02/02/18 19:50	
<i>Surrogate(s)</i>						
1,3-Dimethyl-2-nitrobenzene	70% Conc: 349	76-128			02/02/18 19:50	S-GC
<i>Triphenyl phosphate</i>	162% Conc: 809	40-163			02/02/18 19:50	



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Ventura, CA 93003

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Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-178-4
8A09125-02 (Water) Sampled: 01/09/18 6:45 by Scott Jordan

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0	Batch ID: W8A0694	Instr: LC12	Prepared: 01/12/18 08:45		Analyst: jan	
Chloride, Total	87	0.50	mg/l	1	01/12/18 21:37	
Sulfate as SO ₄	100	1.0	mg/l	2	01/12/18 21:37	
Chlorinated Pesticides and/or PCBs by GC/ECD						
Method: EPA 608	Batch ID: W8A0588	Instr: GC07	Prepared: 01/11/18 08:32		Analyst: rmr	
2,4'-DDD	ND	25	ng/l	5	01/19/18 02:57	M-04
2,4'-DDE	ND	25	ng/l	5	01/19/18 02:57	M-04
2,4'-DDT	ND	25	ng/l	5	01/19/18 02:57	M-04
4,4'-DDD	ND	25	ng/l	5	01/19/18 02:57	M-04
4,4'-DDE	ND	25	ng/l	5	01/19/18 02:57	M-04
4,4'-DDT	ND	25	ng/l	5	01/19/18 02:57	M-04
Aldrin	ND	25	ng/l	5	01/19/18 02:57	M-04
alpha-BHC	ND	25	ng/l	5	01/19/18 02:57	M-04
alpha-Chlordane	ND	25	ng/l	5	01/19/18 02:57	M-04
Aroclor 1016	ND	2500	ng/l	5	01/19/18 02:57	M-04, R-01
Aroclor 1221	ND	2500	ng/l	5	01/19/18 02:57	M-04, R-01
Aroclor 1232	ND	2500	ng/l	5	01/19/18 02:57	M-04, R-01
Aroclor 1242	ND	2500	ng/l	5	01/19/18 02:57	M-04, R-01
Aroclor 1248	ND	2500	ng/l	5	01/19/18 02:57	M-04, R-01
Aroclor 1254	ND	2500	ng/l	5	01/19/18 02:57	M-04, R-01
Aroclor 1260	ND	2500	ng/l	5	01/19/18 02:57	M-04, R-01
beta-BHC	ND	25	ng/l	5	01/19/18 02:57	M-04
Chlordane (tech)	ND	500	ng/l	5	01/19/18 02:57	M-04
cis-Nonachlor	ND	25	ng/l	5	01/19/18 02:57	M-04
delta-BHC	ND	25	ng/l	5	01/19/18 02:57	M-04
Dieldrin	ND	25	ng/l	5	01/19/18 02:57	M-04
Endosulfan I	ND	25	ng/l	5	01/19/18 02:57	M-04
Endosulfan II	ND	25	ng/l	5	01/19/18 02:57	M-04
Endosulfan sulfate	ND	25	ng/l	5	01/19/18 02:57	M-04
Endrin	ND	25	ng/l	5	01/19/18 02:57	M-04
Endrin aldehyde	ND	25	ng/l	5	01/19/18 02:57	M-04
gamma-BHC (Lindane)	ND	25	ng/l	5	01/19/18 02:57	M-04
gamma-Chlordane	ND	25	ng/l	5	01/19/18 02:57	M-04
Heptachlor	ND	25	ng/l	5	01/19/18 02:57	M-04
Heptachlor epoxide	ND	25	ng/l	5	01/19/18 02:57	M-04
Methoxychlor	ND	25	ng/l	5	01/19/18 02:57	M-04
Mirex	ND	25	ng/l	5	01/19/18 02:57	M-04

8A09125

Page 7 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-178-4	Sampled: 01/09/18 6:45 by Scott Jordan
8A09125-02 (Water)	(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)						
Method: EPA 608	Batch ID: W8A0588	Instr: GC07	Prepared: 01/11/18 08:32		Analyst: rmr	
Toxaphene	ND	2500	ng/l	5	01/19/18 02:57	M-04
trans-Nonachlor	ND	25	ng/l	5	01/19/18 02:57	M-04
<i>Surrogate(s)</i>						
<i>Decachlorobiphenyl</i>	44%	Conc: 44.1	34-125		01/19/18 02:57	M-04
<i>Tetrachloro-meta-xylene</i>	59%	Conc: 58.5	35-111		01/19/18 02:57	M-04

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 350.1	Batch ID: W8A0652	Instr: AA06	Prepared: 01/11/18 16:06	Analyst: mnq	
Ammonia as N	0.48	0.10	mg/l	1	01/13/18 19:51
Method: EPA 353.2	Batch ID: W8A0497	Instr: AA01	Prepared: 01/10/18 09:52	Analyst: nat	
NO₂+NO₃ as N	3900	200	ug/l	1	01/10/18 14:49
Method: EPA 365.1	Batch ID: W8A0460	Instr: AA01	Prepared: 01/09/18 18:29	Analyst: nat	
o-Phosphate as P	2.4	0.050	mg/l	25	01/09/18 19:42
Method: EPA 365.1	Batch ID: W8A0461	Instr: AA01	Prepared: 01/09/18 18:31	Analyst: nat	
o-Phosphate as P, dissolved	2400	50	ug/l	25	01/09/18 20:07
Method: EPA 365.1	Batch ID: W8A0773	Instr: AA01	Prepared: 01/12/18 16:54	Analyst: nat	
Phosphorus, Dissolved	2.4	0.50	mg/l	5	01/15/18 18:56
Method: EPA 365.1	Batch ID: W8A0894	Instr: AA01	Prepared: 01/16/18 13:14	Analyst: nat	
Phosphorus as P, Total	5.6	1.2	mg/l	5	01/18/18 15:01
Method: SM 2540C	Batch ID: W8A0520	Instr: OVEN01	Prepared: 01/10/18 12:07	Analyst: ymt	
Total Dissolved Solids	520	10	mg/l	1	01/14/18 21:48
Method: SM 2540D	Batch ID: W8A0663	Instr: OVEN11	Prepared: 01/11/18 18:04	Analyst: ajk	
Total Suspended Solids	930	5	mg/l	1	01/11/18 19:05

Metals by EPA 200 Series Methods

Method: EPA 200.7	Batch ID: [CALC]	Instr: [CALC]	Prepared: 01/11/18 17:33	Analyst: JCK	
Calcium Hardness as CaCO₃	172	0.250	mg/l	1	01/15/18 14:52
Method: EPA 200.7	Batch ID: W8A0658	Instr: ICP03	Prepared: 01/11/18 17:33	Analyst: JCK	
Calcium, Total	69.0	0.100	mg/l	1	01/15/18 14:52

Method: EPA 200.8

Copper, Total	73	0.50	ug/l	1	01/15/18 18:56
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Method: EPA 8270M	Batch ID: W8A0893	Instr: GCMS15	Prepared: 01/15/18 16:31	Analyst: EFC	
Allethrin	ND	20	ng/l	10	01/30/18 01:37
Bifenthrin	ND	20	ng/l	10	01/30/18 01:37
Cyfluthrin	ND	20	ng/l	10	01/30/18 01:37
Cypermethrin	ND	20	ng/l	10	01/30/18 01:37
Deltamethrin/Tralomethrin	ND	20	ng/l	10	01/30/18 01:37

8A09125

Page 8 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Sample Results

(Continued)

Sample: LAILG-NGA-178-4	Sampled: 01/09/18 6:45 by Scott Jordan
8A09125-02 (Water)	(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Pyrethroid Pesticides by EPA 8270M (Continued)						
Method: EPA 8270M	Batch ID: W8A0893	Instr: GCMS15	Prepared: 01/15/18 16:31		Analyst: EFC	
Dichloran	ND	20	ng/l	10	01/30/18 01:37	M-04
Fenpropathrin (Danitol)	ND	20	ng/l	10	01/30/18 01:37	M-04
Fenvalerate/Esfenvalerate	ND	20	ng/l	10	01/30/18 01:37	M-04
L-Cyhalothrin	ND	20	ng/l	10	01/30/18 01:37	M-04
Pendimethalin	ND	20	ng/l	10	01/30/18 01:37	M-04
Permethrin	ND	50	ng/l	10	01/30/18 01:37	M-04
Prallethrin	ND	20	ng/l	10	01/30/18 01:37	M-04
Sumithrin (Phenothrin)	ND	100	ng/l	10	01/30/18 01:37	M-04
Tefluthrin	ND	20	ng/l	10	01/30/18 01:37	M-04
<i>Surrogate(s)</i>						
Perylene-d12	78%	Conc: 195	2-205		01/30/18 01:37	M-04
Triphenyl phosphate	95%	Conc: 237	6-222		01/30/18 01:37	M-04

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 525.2M	Batch ID: W8A1020	Instr: GCMS13	Prepared: 01/17/18 09:22	Analyst: EFC
Azinphos methyl (Guthion)	ND	10	ng/l	1 02/02/18 20:14
Bolstar	ND	10	ng/l	1 02/02/18 20:14
Chlorpyrifos	ND	10	ng/l	1 02/02/18 20:14
Coumaphos	ND	10	ng/l	1 02/02/18 20:14
Demeton-o	ND	10	ng/l	1 02/02/18 20:14
Demeton-s	ND	10	ng/l	1 02/02/18 20:14
Diazinon	ND	10	ng/l	1 02/02/18 20:14
Dichlorvos	ND	10	ng/l	1 02/02/18 20:14
Dimethoate	13	10	ng/l	1 02/06/18 16:22
Disulfoton	ND	10	ng/l	1 02/02/18 20:14
Ethoprop	ND	10	ng/l	1 02/02/18 20:14
Ethyl parathion	ND	10	ng/l	1 02/02/18 20:14
Fensulfothion	ND	10	ng/l	1 02/02/18 20:14
Fenthion	ND	10	ng/l	1 02/02/18 20:14
Malathion	ND	10	ng/l	1 02/02/18 20:14
Merphos	ND	10	ng/l	1 02/02/18 20:14
Methyl parathion	ND	10	ng/l	1 02/02/18 20:14
Mevinphos	ND	10	ng/l	1 02/02/18 20:14
Naled	ND	10	ng/l	1 02/02/18 20:14
Phorate	ND	10	ng/l	1 02/02/18 20:14
Ronnel	ND	10	ng/l	1 02/02/18 20:14
Stirophos	ND	10	ng/l	1 02/02/18 20:14
Tokuthion (Prothifos)	ND	10	ng/l	1 02/02/18 20:14

8A09125

Page 9 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Sample Results

(Continued)

Sample: LAILG-NGA-178-4 Sampled: 01/09/18 6:45 by Scott Jordan
8A09125-02 (Water) (Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)						
Method: EPA 525.2M	Batch ID: W8A1020	Instr: GCMS13	Prepared: 01/17/18 09:22		Analyst: EFC	
Trichloronate	ND	10	ng/l	1	02/02/18 20:14	
<i>Surrogate(s)</i>						
1,3-Dimethyl-2-nitrobenzene	55% Conc: 274	76-128			02/02/18 20:14	S-GC
Triphenyl phosphate	127% Conc: 637	40-163			02/02/18 20:14	



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

 Sample Results

(Continued)

Sample: LAILG-NGA-124-9
8A09125-03 (Water) Sampled: 01/09/18 8:30 by Scott Jordan

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0	Batch ID: W8A0694	Instr: LC12	Prepared: 01/12/18 08:45		Analyst: jan	
Chloride, Total	44	0.50	mg/l	1	01/12/18 21:37	
Sulfate as SO ₄	270	2.5	mg/l	5	01/12/18 21:37	
Chlorinated Pesticides and/or PCBs by GC/ECD						
Method: EPA 608	Batch ID: W8A0588	Instr: GC07	Prepared: 01/11/18 08:32		Analyst: rmr	
2,4'-DDD	ND	50	ng/l	10	01/19/18 03:28	M-04
2,4'-DDE	ND	50	ng/l	10	01/19/18 03:28	M-04
2,4'-DDT	ND	50	ng/l	10	01/19/18 03:28	M-04
4,4'-DDD	ND	50	ng/l	10	01/19/18 03:28	M-04
4,4'-DDE	ND	50	ng/l	10	01/19/18 03:28	M-04
4,4'-DDT	ND	50	ng/l	10	01/19/18 03:28	M-04
Aldrin	ND	50	ng/l	10	01/19/18 03:28	M-04
alpha-BHC	ND	50	ng/l	10	01/19/18 03:28	M-04
alpha-Chlordane	ND	50	ng/l	10	01/19/18 03:28	M-04
Aroclor 1016	ND	1000	ng/l	10	01/19/18 03:28	M-04
Aroclor 1221	ND	1000	ng/l	10	01/19/18 03:28	M-04
Aroclor 1232	ND	1000	ng/l	10	01/19/18 03:28	M-04
Aroclor 1242	ND	1000	ng/l	10	01/19/18 03:28	M-04
Aroclor 1248	ND	1000	ng/l	10	01/19/18 03:28	M-04
Aroclor 1254	ND	1000	ng/l	10	01/19/18 03:28	M-04
Aroclor 1260	ND	1000	ng/l	10	01/19/18 03:28	M-04
beta-BHC	ND	50	ng/l	10	01/19/18 03:28	M-04
Chlordane (tech)	ND	1000	ng/l	10	01/19/18 03:28	M-04
cis-Nonachlor	ND	50	ng/l	10	01/19/18 03:28	M-04
delta-BHC	ND	50	ng/l	10	01/19/18 03:28	M-04
Dieldrin	ND	50	ng/l	10	01/19/18 03:28	M-04
Endosulfan I	ND	50	ng/l	10	01/19/18 03:28	M-04
Endosulfan II	ND	50	ng/l	10	01/19/18 03:28	M-04
Endosulfan sulfate	ND	50	ng/l	10	01/19/18 03:28	M-04
Endrin	ND	50	ng/l	10	01/19/18 03:28	M-04
Endrin aldehyde	ND	50	ng/l	10	01/19/18 03:28	M-04
gamma-BHC (Lindane)	ND	50	ng/l	10	01/19/18 03:28	M-04
gamma-Chlordane	ND	50	ng/l	10	01/19/18 03:28	M-04
Heptachlor	ND	50	ng/l	10	01/19/18 03:28	M-04
Heptachlor epoxide	ND	50	ng/l	10	01/19/18 03:28	M-04
Methoxychlor	ND	50	ng/l	10	01/19/18 03:28	M-04
Mirex	ND	50	ng/l	10	01/19/18 03:28	M-04

8A09125

Page 11 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-124-9						Sampled: 01/09/18 8:30 by Scott Jordan
	8A09125-03 (Water)					(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Method: EPA 608	Batch ID: W8A0588	Instr: GC07	Prepared: 01/11/18 08:32	Analyst: rmr		
Toxaphene		ND	5000	ng/l	10	01/19/18 03:28
trans-Nonachlor		ND	50	ng/l	10	01/19/18 03:28
Surrogate(s)						
Decachlorobiphenyl		60%	Conc: 59.7	34-125		01/19/18 03:28
Tetrachloro-meta-xylene		66%	Conc: 66.1	35-111		01/19/18 03:28

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 350.1	Batch ID: W8A0652	Instr: AA06	Prepared: 01/11/18 16:06	Analyst: mnq		
Ammonia as N		4.1	0.10	mg/l	1	01/13/18 19:51
Method: EPA 353.2	Batch ID: W8A0497	Instr: AA01	Prepared: 01/10/18 09:52	Analyst: nat		
NO2+NO3 as N		35000	1000	ug/l	5	01/10/18 15:05
Method: EPA 365.1	Batch ID: W8A0460	Instr: AA01	Prepared: 01/09/18 18:29	Analyst: nat		
o-Phosphate as P		1.8	0.050	mg/l	25	01/09/18 19:43
Method: EPA 365.1	Batch ID: W8A0461	Instr: AA01	Prepared: 01/09/18 18:31	Analyst: nat		
o-Phosphate as P, dissolved		1900	50	ug/l	25	01/09/18 20:11
Method: EPA 365.1	Batch ID: W8A0773	Instr: AA01	Prepared: 01/12/18 16:54	Analyst: nat		
Phosphorus, Dissolved		2.0	0.10	mg/l	1	01/15/18 18:40
Method: EPA 365.1	Batch ID: W8A0894	Instr: AA01	Prepared: 01/16/18 13:14	Analyst: nat		
Phosphorus as P, Total		3.0	0.25	mg/l	1	01/18/18 14:27
Method: SM 2540C	Batch ID: W8A0520	Instr: OVEN01	Prepared: 01/10/18 12:07	Analyst: ymt		
Total Dissolved Solids		840	10	mg/l	1	01/14/18 21:48
Method: SM 2540D	Batch ID: W8A0459	Instr: OVEN11	Prepared: 01/09/18 18:26	Analyst: ajk		
Total Suspended Solids		150	5	mg/l	1	01/10/18 16:30

Metals by EPA 200 Series Methods

Method: EPA 200.7	Batch ID: [CALC]	Instr: [CALC]	Prepared: 01/11/18 17:33	Analyst: JCK		
Calcium Hardness as CaCO3		327	0.250	mg/l	1	01/15/18 14:55
Method: EPA 200.7	Batch ID: W8A0658	Instr: ICP03	Prepared: 01/11/18 17:33	Analyst: JCK		
Calcium, Total		131	0.100	mg/l	1	01/15/18 14:55
Method: EPA 200.8	Batch ID: W8A0660	Instr: ICPMS04	Prepared: 01/11/18 17:37	Analyst: rrl		
Copper, Total		59	0.50	ug/l	1	01/15/18 19:00

Pyrethroid Pesticides by EPA 8270M

Method: EPA 8270M	Batch ID: W8A0893	Instr: GCMS15	Prepared: 01/15/18 16:31	Analyst: EFC		
Allethrin		ND	40	ng/l	20	01/30/18 02:10
Bifenthrin		180	40	ng/l	20	01/30/18 02:10
Cyfluthrin		ND	40	ng/l	20	01/30/18 02:10
Cypermethrin		ND	40	ng/l	20	01/30/18 02:10
Deltamethrin/Tralomethrin		ND	40	ng/l	20	01/30/18 02:10

8A09125

Page 12 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-124-9	Sampled: 01/09/18 8:30 by Scott Jordan
8A09125-03 (Water)	(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Pyrethroid Pesticides by EPA 8270M (Continued)						
Method: EPA 8270M	Batch ID: W8A0893	Instr: GCMS15	Prepared: 01/15/18 16:31		Analyst: EFC	
Dichloran	ND	40	ng/l	20	01/30/18 02:10	M-04
Fenpropathrin (Danitol)	ND	40	ng/l	20	01/30/18 02:10	M-04
Fenvalerate/Esfenvalerate	ND	40	ng/l	20	01/30/18 02:10	M-04
L-Cyhalothrin	ND	40	ng/l	20	01/30/18 02:10	M-04
Pendimethalin	46	40	ng/l	20	01/30/18 02:10	M-04
Permethrin	ND	100	ng/l	20	01/30/18 02:10	M-04
Prallethrin	ND	40	ng/l	20	01/30/18 02:10	M-04
Sumithrin (Phenothrin)	ND	200	ng/l	20	01/30/18 02:10	M-04
Tefluthrin	ND	40	ng/l	20	01/30/18 02:10	M-04
<i>Surrogate(s)</i>						
<i>Perylene-d12</i>	69%	Conc: 173	2-205		01/30/18 02:10	M-04
<i>Triphenyl phosphate</i>	90%	Conc: 226	6-222		01/30/18 02:10	M-04

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 525.2M	Batch ID: W8A1020	Instr: GCMS13	Prepared: 01/17/18 09:22	Analyst: EFC
Azinphos methyl (Guthion)	ND	10	ng/l	1 02/02/18 20:39
Bolstar	ND	10	ng/l	1 02/02/18 20:39
Chlorpyrifos	ND	10	ng/l	1 02/02/18 20:39
Coumaphos	ND	10	ng/l	1 02/02/18 20:39
Demeton-o	ND	10	ng/l	1 02/02/18 20:39
Demeton-s	ND	10	ng/l	1 02/02/18 20:39
Diazinon	ND	10	ng/l	1 02/02/18 20:39
Dichlorvos	ND	10	ng/l	1 02/02/18 20:39
Dimethoate	ND	10	ng/l	1 02/06/18 16:47
Disulfoton	ND	10	ng/l	1 02/02/18 20:39
Ethoprop	ND	10	ng/l	1 02/02/18 20:39
Ethyl parathion	ND	10	ng/l	1 02/02/18 20:39
Fensulfothion	ND	10	ng/l	1 02/02/18 20:39
Fenthion	ND	10	ng/l	1 02/02/18 20:39
Malathion	ND	10	ng/l	1 02/02/18 20:39
Merphos	ND	10	ng/l	1 02/02/18 20:39
Methyl parathion	ND	10	ng/l	1 02/02/18 20:39
Mevinphos	ND	10	ng/l	1 02/02/18 20:39
Naled	ND	10	ng/l	1 02/02/18 20:39
Phorate	ND	10	ng/l	1 02/02/18 20:39
Ronnel	ND	10	ng/l	1 02/02/18 20:39
Stirophos	ND	10	ng/l	1 02/02/18 20:39
Tokuthion (Prothifos)	ND	10	ng/l	1 02/02/18 20:39

8A09125

Page 13 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Sample Results

(Continued)

Sample: LAILG-NGA-124-9 Sampled: 01/09/18 8:30 by Scott Jordan
8A09125-03 (Water) (Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)						
Method: EPA 525.2M	Batch ID: W8A1020	Instr: GCMS13	Prepared: 01/17/18 09:22		Analyst: EFC	
Trichloronate	ND	10	ng/l	1	02/02/18 20:39	
<i>Surrogate(s)</i>						
1,3-Dimethyl-2-nitrobenzene	55% Conc: 274	76-128			02/02/18 20:39	S-GC
<i>Triphenyl phosphate</i>	124% Conc: 622	40-163			02/02/18 20:39	



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Sample Results

(Continued)

Sample: LAILG-NGA-202-2
8A09125-04 (Water) Sampled: 01/09/18 11:30 by Scott Jordan

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0	Batch ID: W8A0694	Instr: LC12	Prepared: 01/12/18 08:45		Analyst: jan	
Chloride, Total	30	0.50	mg/l	1	01/12/18 21:37	
Sulfate as SO4	60	0.50	mg/l	1	01/12/18 21:37	
Chlorinated Pesticides and/or PCBs by GC/ECD						
Method: EPA 608	Batch ID: W8A0588	Instr: GC07	Prepared: 01/11/18 08:32		Analyst: rmr	
2,4'-DDD	ND	25	ng/l	5	01/19/18 03:58	M-04
2,4'-DDE	ND	25	ng/l	5	01/19/18 03:58	M-04
2,4'-DDT	ND	25	ng/l	5	01/19/18 03:58	M-04
4,4'-DDD	ND	25	ng/l	5	01/19/18 03:58	M-04
4,4'-DDE	ND	25	ng/l	5	01/19/18 03:58	M-04
4,4'-DDT	ND	25	ng/l	5	01/19/18 03:58	M-04
Aldrin	ND	25	ng/l	5	01/19/18 03:58	M-04
alpha-BHC	ND	25	ng/l	5	01/19/18 03:58	M-04
alpha-Chlordane	ND	25	ng/l	5	01/19/18 03:58	M-04
Aroclor 1016	ND	2500	ng/l	5	01/19/18 03:58	M-04, R-01
Aroclor 1221	ND	2500	ng/l	5	01/19/18 03:58	M-04, R-01
Aroclor 1232	ND	2500	ng/l	5	01/19/18 03:58	M-04, R-01
Aroclor 1242	ND	2500	ng/l	5	01/19/18 03:58	M-04, R-01
Aroclor 1248	ND	2500	ng/l	5	01/19/18 03:58	M-04, R-01
Aroclor 1254	ND	2500	ng/l	5	01/19/18 03:58	M-04, R-01
Aroclor 1260	ND	2500	ng/l	5	01/19/18 03:58	M-04, R-01
beta-BHC	ND	25	ng/l	5	01/19/18 03:58	M-04
Chlordane (tech)	ND	500	ng/l	5	01/19/18 03:58	M-04
cis-Nonachlor	ND	25	ng/l	5	01/19/18 03:58	M-04
delta-BHC	ND	25	ng/l	5	01/19/18 03:58	M-04
Dieldrin	ND	25	ng/l	5	01/19/18 03:58	M-04
Endosulfan I	ND	25	ng/l	5	01/19/18 03:58	M-04
Endosulfan II	ND	25	ng/l	5	01/19/18 03:58	M-04
Endosulfan sulfate	ND	25	ng/l	5	01/19/18 03:58	M-04
Endrin	ND	25	ng/l	5	01/19/18 03:58	M-04
Endrin aldehyde	ND	25	ng/l	5	01/19/18 03:58	M-04
gamma-BHC (Lindane)	ND	25	ng/l	5	01/19/18 03:58	M-04
gamma-Chlordane	ND	25	ng/l	5	01/19/18 03:58	M-04
Heptachlor	ND	25	ng/l	5	01/19/18 03:58	M-04
Heptachlor epoxide	ND	25	ng/l	5	01/19/18 03:58	M-04
Methoxychlor	ND	25	ng/l	5	01/19/18 03:58	M-04
Mirex	ND	25	ng/l	5	01/19/18 03:58	M-04

8A09125

Page 15 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-202-2						Sampled: 01/09/18 11:30 by Scott Jordan
8A09125-04 (Water)						

(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Method: EPA 608	Batch ID: W8A0588	Instr: GC07	Prepared: 01/11/18 08:32	Analyst: rmr		
Toxaphene		ND	2500	ng/l	5	01/19/18 03:58
trans-Nonachlor		ND	25	ng/l	5	01/19/18 03:58
Surrogate(s)						
Decachlorobiphenyl		55%	Conc: 55.2	34-125		01/19/18 03:58
Tetrachloro-meta-xylene		62%	Conc: 62.4	35-111		01/19/18 03:58

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 350.1	Batch ID: W8A0652	Instr: AA06	Prepared: 01/11/18 16:06	Analyst: mnq		
Ammonia as N		0.23	0.10	mg/l	1	01/13/18 19:51
Method: EPA 353.2	Batch ID: W8A0497	Instr: AA01	Prepared: 01/10/18 09:52	Analyst: nat		
NO2+NO3 as N		7200	200	ug/l	1	01/10/18 14:51
Method: EPA 365.1	Batch ID: W8A0460	Instr: AA01	Prepared: 01/09/18 18:29	Analyst: nat		
o-Phosphate as P		1.8	0.050	mg/l	25	01/09/18 20:25
Method: EPA 365.1	Batch ID: W8A0461	Instr: AA01	Prepared: 01/09/18 18:31	Analyst: nat		
o-Phosphate as P, dissolved		1800	50	ug/l	25	01/09/18 20:21
Method: EPA 365.1	Batch ID: W8A0773	Instr: AA01	Prepared: 01/12/18 16:54	Analyst: nat		
Phosphorus, Dissolved		1.8	0.50	mg/l	10	01/15/18 18:50
Method: EPA 365.1	Batch ID: W8A0894	Instr: AA01	Prepared: 01/16/18 13:14	Analyst: nat		
Phosphorus as P, Total		2.2	0.20	mg/l	2	01/22/18 17:39
Method: SM 2540C	Batch ID: W8A0520	Instr: OVEN01	Prepared: 01/10/18 12:07	Analyst: ymt		
Total Dissolved Solids		310	10	mg/l	1	01/14/18 21:48
Method: SM 2540D	Batch ID: W8A0663	Instr: OVEN11	Prepared: 01/11/18 18:04	Analyst: ajk		
Total Suspended Solids		61	5	mg/l	1	01/11/18 19:05

Metals by EPA 200 Series Methods

Method: EPA 200.7	Batch ID: [CALC]	Instr: [CALC]	Prepared: 01/11/18 17:33	Analyst: JCK		
Calcium Hardness as CaCO3		99.2	0.250	mg/l	1	01/15/18 14:57
Method: EPA 200.7	Batch ID: W8A0658	Instr: ICP03	Prepared: 01/11/18 17:33	Analyst: JCK		
Calcium, Total		39.7	0.100	mg/l	1	01/15/18 14:57

Method: EPA 200.8	Batch ID: W8A0660	Instr: ICPMS04	Prepared: 01/11/18 17:37	Analyst: rrl		
Copper, Total		37	0.50	ug/l	1	01/15/18 19:04

Pyrethroid Pesticides by EPA 8270M

Method: EPA 8270M	Batch ID: W8A0893	Instr: GCMS15	Prepared: 01/15/18 16:31	Analyst: EFC		
Allethrin		ND	10	ng/l	5	01/30/18 02:43
Bifenthrin		ND	10	ng/l	5	01/30/18 02:43
Cyfluthrin		ND	10	ng/l	5	01/30/18 02:43
Cypermethrin		ND	10	ng/l	5	01/30/18 02:43
Deltamethrin/Tralomethrin		13	10	ng/l	5	01/30/18 02:43

8A09125

Page 16 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-202-2	Sampled: 01/09/18 11:30 by Scott Jordan
8A09125-04 (Water)	(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Pyrethroid Pesticides by EPA 8270M (Continued)						
Method: EPA 8270M	Batch ID: W8A0893	Instr: GCMS15	Prepared: 01/15/18 16:31		Analyst: EFC	
Dichloran	ND	10	ng/l	5	01/30/18 02:43	M-04
Fenpropathrin (Danitol)	ND	10	ng/l	5	01/30/18 02:43	M-04
Fenvalerate/Esfenvalerate	ND	10	ng/l	5	01/30/18 02:43	M-04
L-Cyhalothrin	ND	10	ng/l	5	01/30/18 02:43	M-04
Pendimethalin	34	10	ng/l	5	01/30/18 02:43	M-04
Permethrin	ND	25	ng/l	5	01/30/18 02:43	M-04
Prallethrin	ND	10	ng/l	5	01/30/18 02:43	M-04
Sumithrin (Phenothrin)	ND	50	ng/l	5	01/30/18 02:43	M-04
Tefluthrin	ND	10	ng/l	5	01/30/18 02:43	M-04
<i>Surrogate(s)</i>						
<i>Perylene-d12</i>	71%	Conc: 177	2-205		01/30/18 02:43	M-04
<i>Triphenyl phosphate</i>	80%	Conc: 201	6-222		01/30/18 02:43	M-04

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 525.2M	Batch ID: W8A1020	Instr: GCMS13	Prepared: 01/17/18 09:22	Analyst: EFC
Azinphos methyl (Guthion)	ND	10	ng/l	1 02/02/18 21:03
Bolstar	ND	10	ng/l	1 02/02/18 21:03
Chlorpyrifos	ND	10	ng/l	1 02/02/18 21:03
Coumaphos	ND	10	ng/l	1 02/02/18 21:03
Demeton-o	ND	10	ng/l	1 02/02/18 21:03
Demeton-s	ND	10	ng/l	1 02/02/18 21:03
Diazinon	ND	10	ng/l	1 02/02/18 21:03
Dichlorvos	ND	10	ng/l	1 02/02/18 21:03
Dimethoate	ND	10	ng/l	1 02/06/18 17:12
Disulfoton	ND	10	ng/l	1 02/02/18 21:03
Ethoprop	ND	10	ng/l	1 02/02/18 21:03
Ethyl parathion	ND	10	ng/l	1 02/02/18 21:03
Fensulfothion	ND	10	ng/l	1 02/02/18 21:03
Fenthion	ND	10	ng/l	1 02/02/18 21:03
Malathion	73	10	ng/l	1 02/02/18 21:03
Merphos	ND	10	ng/l	1 02/02/18 21:03
Methyl parathion	ND	10	ng/l	1 02/02/18 21:03
Mevinphos	ND	10	ng/l	1 02/02/18 21:03
Naled	ND	10	ng/l	1 02/02/18 21:03
Phorate	ND	10	ng/l	1 02/02/18 21:03
Ronnel	ND	10	ng/l	1 02/02/18 21:03
Stirophos	ND	10	ng/l	1 02/02/18 21:03
Tokuthion (Prothifos)	ND	10	ng/l	1 02/02/18 21:03

8A09125

Page 17 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Sample Results

(Continued)

Sample: LAILG-NGA-202-2 Sampled: 01/09/18 11:30 by Scott Jordan
8A09125-04 (Water) (Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)						
Method: EPA 525.2M	Batch ID: W8A1020	Instr: GCMS13	Prepared: 01/17/18 09:22		Analyst: EFC	
Trichloronate	ND	10	ng/l	1	02/02/18 21:03	
<i>Surrogate(s)</i>						
1,3-Dimethyl-2-nitrobenzene	56% Conc: 281	76-128			02/02/18 21:03	S-GC
Triphenyl phosphate	120% Conc: 601	40-163			02/02/18 21:03	



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Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Quality Control Results

Anions by IC, EPA Method 300.0

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0694 - EPA 300.0										
Blank (W8A0694-BLK1)										
Chloride, Total	ND	0.50	mg/l		Prepared & Analyzed: 01/12/18					
Sulfate as SO ₄	ND	0.50	mg/l							
LCS (W8A0694-BS1)										
Chloride, Total	10.0	0.50	mg/l	10.0		100	90-110			
Sulfate as SO ₄	10.2	0.50	mg/l	10.1		101	90-110			
Matrix Spike (W8A0694-MS1)										
Chloride, Total	121	5.0	mg/l	100	23.0	98	76-118			
Sulfate as SO ₄	163	5.0	mg/l	101	61.5	100	78-111			
Matrix Spike (W8A0694-MS2)										
Chloride, Total	184	5.0	mg/l	100	86.9	97	76-118			
Sulfate as SO ₄	207	5.0	mg/l	101	102	104	78-111			
Matrix Spike Dup (W8A0694-MSD1)										
Chloride, Total	121	5.0	mg/l	100	23.0	98	76-118	0.06	20	
Sulfate as SO ₄	163	5.0	mg/l	101	61.5	100	78-111	0.01	20	
Matrix Spike Dup (W8A0694-MSD2)										
Chloride, Total	187	5.0	mg/l	100	86.9	100	76-118	1	20	
Sulfate as SO ₄	210	5.0	mg/l	101	102	108	78-111	2	20	



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:

02/13/2018 12:25

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0588 - EPA 608										
Blank (W8A0588-BLK1)										
2,4'-DDD	ND	5.0	ng/l							
2,4'-DDE	ND	5.0	ng/l							
2,4'-DDT	ND	5.0	ng/l							
4,4'-DDD	ND	5.0	ng/l							
4,4'-DDE	ND	5.0	ng/l							
4,4'-DDT	ND	5.0	ng/l							
Aldrin	ND	5.0	ng/l							
alpha-BHC	ND	5.0	ng/l							
alpha-Chlordane	ND	5.0	ng/l							
Aroclor 1016	ND	100	ng/l							
Aroclor 1221	ND	100	ng/l							
Aroclor 1232	ND	100	ng/l							
Aroclor 1242	ND	100	ng/l							
Aroclor 1248	ND	100	ng/l							
Aroclor 1254	ND	100	ng/l							
Aroclor 1260	ND	100	ng/l							
beta-BHC	ND	5.0	ng/l							
Chlordane (tech)	ND	100	ng/l							
cis-Nonachlor	ND	5.0	ng/l							
delta-BHC	ND	5.0	ng/l							
Dieldrin	ND	5.0	ng/l							
Endosulfan I	ND	5.0	ng/l							
Endosulfan II	ND	5.0	ng/l							
Endosulfan sulfate	ND	5.0	ng/l							
Endrin	ND	5.0	ng/l							
Endrin aldehyde	ND	5.0	ng/l							
gamma-BHC (Lindane)	ND	5.0	ng/l							
gamma-Chlordane	ND	5.0	ng/l							
Heptachlor	ND	5.0	ng/l							
Heptachlor epoxide	ND	5.0	ng/l							
Methoxychlor	ND	5.0	ng/l							
Mirex	ND	5.0	ng/l							
Oxychlordane	ND	5.0	ng/l							
Toxaphene	ND	500	ng/l							
trans-Nonachlor	ND	5.0	ng/l							
Surrogate(s)										
Decachlorobiphenyl		95.6	ng/l		100		96	34-125		

8A09125

Page 20 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:

02/13/2018 12:25

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0588 - EPA 608 (Continued)										
Blank (W8A0588-BLK1)										
<i>Surrogate(s)</i>										
Tetrachloro-meta-xylene		83.1	ng/l	100		83	35-111			
Blank (W8A0588-BLK2)										
2,4'-DDD	ND	5.0	ng/l							QC-2
2,4'-DDE	ND	5.0	ng/l							QC-2
2,4'-DDT	ND	5.0	ng/l							QC-2
4,4'-DDD	ND	5.0	ng/l							QC-2
4,4'-DDE	ND	5.0	ng/l							QC-2
4,4'-DDT	ND	5.0	ng/l							QC-2
Aldrin	ND	5.0	ng/l							QC-2
alpha-BHC	ND	5.0	ng/l							QC-2
alpha-Chlordane	ND	5.0	ng/l							QC-2
Aroclor 1016	ND	100	ng/l							QC-2
Aroclor 1221	ND	100	ng/l							QC-2
Aroclor 1232	ND	100	ng/l							QC-2
Aroclor 1242	ND	100	ng/l							QC-2
Aroclor 1248	ND	100	ng/l							QC-2
Aroclor 1254	ND	100	ng/l							QC-2
Aroclor 1260	ND	100	ng/l							QC-2
beta-BHC	ND	5.0	ng/l							QC-2
Chlordane (tech)	ND	100	ng/l							QC-2
cis-Nonachlor	ND	5.0	ng/l							QC-2
delta-BHC	ND	5.0	ng/l							QC-2
Dieldrin	ND	5.0	ng/l							QC-2
Endosulfan I	ND	5.0	ng/l							QC-2
Endosulfan II	ND	5.0	ng/l							QC-2
Endosulfan sulfate	ND	5.0	ng/l							QC-2
Endrin	ND	5.0	ng/l							QC-2
Endrin aldehyde	ND	5.0	ng/l							QC-2
gamma-BHC (Lindane)	ND	5.0	ng/l							QC-2
gamma-Chlordane	ND	5.0	ng/l							QC-2
Heptachlor	ND	5.0	ng/l							QC-2
Heptachlor epoxide	ND	5.0	ng/l							QC-2
Methoxychlor	ND	5.0	ng/l							QC-2
Mirex	ND	5.0	ng/l							QC-2
Toxaphene	ND	500	ng/l							QC-2
trans-Nonachlor	ND	5.0	ng/l							QC-2

8A09125

Page 21 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:

02/13/2018 12:25

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0588 - EPA 608 (Continued)										
Blank (W8A0588-BLK2)										
<i>Surrogate(s)</i>										
Decachlorobiphenyl		102	ng/l	100	102	34-125				QC-2
Tetrachloro-meta-xylene		80.3	ng/l	100	80	35-111				QC-2
LCS (W8A0588-BS1)										
4,4'-DDD	91.0	5.0	ng/l	100	91	42-133				
4,4'-DDE	86.3	5.0	ng/l	100	86	33-126				
4,4'-DDT	87.2	5.0	ng/l	100	87	35-147				
Aldrin	76.4	5.0	ng/l	100	76	18-117				
alpha-BHC	71.2	5.0	ng/l	100	71	47-119				
beta-BHC	95.5	5.0	ng/l	100	96	53-123				
delta-BHC	88.1	5.0	ng/l	100	88	51-123				
Dieldrin	84.4	5.0	ng/l	100	84	48-123				
Endosulfan I	80.0	5.0	ng/l	100	80	14-131				
Endosulfan II	87.0	5.0	ng/l	100	87	40-121				
Endosulfan sulfate	74.0	5.0	ng/l	100	74	44-140				
Endrin	85.7	5.0	ng/l	100	86	40-143				
Endrin aldehyde	91.6	5.0	ng/l	100	92	18-136				
gamma-BHC (Lindane)	78.7	5.0	ng/l	100	79	49-117				
Heptachlor	77.1	5.0	ng/l	100	77	31-130				
Heptachlor epoxide	84.2	5.0	ng/l	100	84	49-122				
<i>Surrogate(s)</i>										
Decachlorobiphenyl		86.2	ng/l	100	86	34-125				
Tetrachloro-meta-xylene		72.1	ng/l	100	72	35-111				
LCS (W8A0588-BS2)										
4,4'-DDD	98.3	5.0	ng/l	100	98	42-133				QC-2
4,4'-DDE	92.9	5.0	ng/l	100	93	33-126				QC-2
4,4'-DDT	93.8	5.0	ng/l	100	94	35-147				QC-2
Aldrin	78.8	5.0	ng/l	100	79	18-117				QC-2
alpha-BHC	73.6	5.0	ng/l	100	74	47-119				QC-2
beta-BHC	99.8	5.0	ng/l	100	100	53-123				QC-2
delta-BHC	94.8	5.0	ng/l	100	95	51-123				QC-2
Dieldrin	92.0	5.0	ng/l	100	92	48-123				QC-2
Endosulfan I	86.4	5.0	ng/l	100	86	14-131				QC-2
Endosulfan II	94.2	5.0	ng/l	100	94	40-121				QC-2
Endosulfan sulfate	70.0	5.0	ng/l	100	70	44-140				QC-2
Endrin	107	5.0	ng/l	100	107	40-143				QC-2
Endrin aldehyde	89.9	5.0	ng/l	100	90	18-136				QC-2
gamma-BHC (Lindane)	82.5	5.0	ng/l	100	83	49-117				QC-2

8A09125

Page 22 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:

02/13/2018 12:25

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0588 - EPA 608 (Continued)										
LCS (W8A0588-BS2)										
Heptachlor	80.7	5.0	ng/l	100	81	31-130				QC-2
Heptachlor epoxide	90.7	5.0	ng/l	100	91	49-122				QC-2
<i>Surrogate(s)</i>										
Decachlorobiphenyl		99.0	ng/l	100	99	34-125				QC-2
Tetrachloro-meta-xylene		72.0	ng/l	100	72	35-111				QC-2
Matrix Spike (W8A0588-MS1)										
Source: 8A10004-02										
4,4'-DDD	77.2	50	ng/l	100	ND	77	23-124			M-04
4,4'-DDE	68.3	50	ng/l	100	ND	68	30-114			M-04
4,4'-DDT	59.6	50	ng/l	100	ND	60	11-151			M-04
Aldrin	60.2	50	ng/l	100	ND	60	18-110			M-04
alpha-BHC	64.2	50	ng/l	100	ND	64	43-114			M-04
beta-BHC	90.4	50	ng/l	100	ND	90	24-135			M-04
delta-BHC	80.8	50	ng/l	100	ND	81	37-122			M-04
Dieldrin	65.2	50	ng/l	100	ND	65	27-132			M-04
Endosulfan I	62.9	50	ng/l	100	ND	63	0.1-140			M-04
Endosulfan II	73.0	50	ng/l	100	ND	73	17-122			M-04
Endosulfan sulfate	38.6	50	ng/l	100	ND	39	37-131			M-04
Endrin	106	50	ng/l	100	ND	106	42-144			M-04
Endrin aldehyde	72.6	50	ng/l	100	ND	73	11-113			M-04
gamma-BHC (Lindane)	64.8	50	ng/l	100	ND	65	33-112			M-04
Heptachlor	69.5	50	ng/l	100	ND	70	28-131			M-04
Heptachlor epoxide	66.2	50	ng/l	100	ND	66	36-117			M-04
<i>Surrogate(s)</i>										
Decachlorobiphenyl		89.3	ng/l	100	89	34-125				M-04
Tetrachloro-meta-xylene		66.5	ng/l	100	66	35-111				M-04
Matrix Spike Dup (W8A0588-MSD1)										
Source: 8A10004-02										
Prepared: 01/11/18 Analyzed: 01/19/18										
4,4'-DDD	77.3	50	ng/l	100	ND	77	23-124	0.2	30	M-04
4,4'-DDE	71.3	50	ng/l	100	ND	71	30-114	4	30	M-04
4,4'-DDT	60.1	50	ng/l	100	ND	60	11-151	0.9	30	M-04
Aldrin	61.1	50	ng/l	100	ND	61	18-110	1	30	M-04
alpha-BHC	60.5	50	ng/l	100	ND	60	43-114	6	30	M-04
beta-BHC	80.4	50	ng/l	100	ND	80	24-135	12	30	M-04
delta-BHC	76.9	50	ng/l	100	ND	77	37-122	5	30	M-04
Dieldrin	64.8	50	ng/l	100	ND	65	27-132	0.6	30	M-04
Endosulfan I	59.6	50	ng/l	100	ND	60	0.1-140	5	30	M-04
Endosulfan II	70.2	50	ng/l	100	ND	70	17-122	4	30	M-04
Endosulfan sulfate	44.0	50	ng/l	100	ND	44	37-131	13	30	M-04
Endrin	106	50	ng/l	100	ND	106	42-144	0.3	30	M-04

8A09125

Page 23 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0588 - EPA 608 (Continued)										
Matrix Spike Dup (W8A0588-MSD1)										
Source: 8A10004-02 Prepared: 01/11/18 Analyzed: 01/19/18										
Endrin aldehyde	74.8	50	ng/l	100	ND	75	11-113	3	30	M-04
gamma-BHC (Lindane)	63.5	50	ng/l	100	ND	63	33-112	2	30	M-04
Heptachlor	65.4	50	ng/l	100	ND	65	28-131	6	30	M-04
Heptachlor epoxide	64.9	50	ng/l	100	ND	65	36-117	2	30	M-04
<i>Surrogate(s)</i>										
Decachlorobiphenyl	74.1	ng/l		100		74	34-125			M-04
Tetrachloro-meta-xylene	72.8	ng/l		100		73	35-111			M-04



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
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Certificate of Analysis

FINAL REPORT

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Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0459 - SM 2540D										
Blank (W8A0459-BLK1) Total Suspended Solids	ND	5	mg/l		Prepared: 01/09/18 Analyzed: 01/10/18					
LCS (W8A0459-BS1) Total Suspended Solids	56.0	5	mg/l	61.8		91	90-110			
LCS Dup (W8A0459-BSD1) Total Suspended Solids	66.0	5	mg/l	61.8		107	90-110	16	200	
Duplicate (W8A0459-DUP1) Total Suspended Solids	3.00	5	mg/l	2.00				40	20	R-03
Duplicate (W8A0459-DUP2) Total Suspended Solids	10.0	5	mg/l	9.00				11	20	
Batch: W8A0460 - EPA 365.1										
Blank (W8A0460-BLK1) o-Phosphate as P	ND	0.0020	mg/l		Prepared & Analyzed: 01/09/18					
LCS (W8A0460-BS1) o-Phosphate as P	0.0484	0.0020	mg/l	0.0500		97	90-110			
Matrix Spike (W8A0460-MS1) o-Phosphate as P	2.75	0.050	mg/l	1.25	1.51	99	90-110			
Matrix Spike Dup (W8A0460-MSD1) o-Phosphate as P	2.75	0.050	mg/l	1.25	1.51	99	90-110	0	20	
Batch: W8A0461 - EPA 365.1										
Blank (W8A0461-BLK1) o-Phosphate as P, dissolved	ND	2.0	ug/l		Prepared & Analyzed: 01/09/18					
LCS (W8A0461-BS1) o-Phosphate as P, dissolved	49.3	2.0	ug/l	50.0		99	90-110			
Matrix Spike (W8A0461-MS1) o-Phosphate as P, dissolved	2780	50	ug/l	1250	1500	102	90-110			
Matrix Spike Dup (W8A0461-MSD1) o-Phosphate as P, dissolved	2750	50	ug/l	1250	1500	100	90-110	0.9	20	
Batch: W8A0497 - EPA 353.2										
Blank (W8A0497-BLK1) NO ₂ +NO ₃ as N	ND	200	ug/l		Prepared & Analyzed: 01/10/18					
LCS (W8A0497-BS1) NO ₂ +NO ₃ as N	1040	200	ug/l	1000		104	90-110			
Matrix Spike (W8A0497-MS1) NO ₂ +NO ₃ as N	4860	200	ug/l	2000	2760	105	90-110			
Matrix Spike (W8A0497-MS2) NO ₂ +NO ₃ as N	7980	200	ug/l	2000	6090	94	90-110			



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8A0497 - EPA 353.2 (Continued)										
Matrix Spike Dup (W8A0497-MSD1) NO ₂ +NO ₃ as N	Source: 8A09116-06 4870	200	ug/l		Prepared & Analyzed: 01/10/18 2000	2760	106	90-110	0.2	20
Matrix Spike Dup (W8A0497-MSD2) NO ₂ +NO ₃ as N	Source: 8A09130-04 7950	200	ug/l		Prepared & Analyzed: 01/10/18 2000	6090	93	90-110	0.4	20
Batch: W8A0520 - SM 2540C										
Blank (W8A0520-BLK1) Total Dissolved Solids	ND	10	mg/l		Prepared: 01/10/18 Analyzed: 01/14/18					
LCS (W8A0520-BS1) Total Dissolved Solids	827	10	mg/l		Prepared: 01/10/18 Analyzed: 01/14/18 824	100	96-102			
Duplicate (W8A0520-DUP1) Total Dissolved Solids	Source: 8A09031-01 1240	10	mg/l		Prepared: 01/10/18 Analyzed: 01/14/18 1250			1	10	
Duplicate (W8A0520-DUP2) Total Dissolved Solids	Source: 8A10010-01 2510	10	mg/l		Prepared: 01/10/18 Analyzed: 01/14/18 2470			2	10	
Batch: W8A0652 - EPA 350.1										
Blank (W8A0652-BLK1) Ammonia as N	ND	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18					
Blank (W8A0652-BLK2) Ammonia as N	ND	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18					
LCS (W8A0652-BS1) Ammonia as N	0.260	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18 0.250	104	90-110			
LCS (W8A0652-BS2) Ammonia as N	0.268	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18 0.250	107	90-110			
LCS Dup (W8A0652-BSD1) Ammonia as N	0.267	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18 0.250	107	90-110	3	15	
Matrix Spike (W8A0652-MS1) Ammonia as N	Source: 8A09093-02 0.713	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18 0.250	0.468	98	90-110		
Matrix Spike (W8A0652-MS2) Ammonia as N	Source: 8A09093-03 0.624	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18 0.250	0.357	107	90-110		
Matrix Spike Dup (W8A0652-MSD1) Ammonia as N	Source: 8A09093-02 0.726	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18 0.250	0.468	103	90-110	2	15
Matrix Spike Dup (W8A0652-MSD2) Ammonia as N	Source: 8A09093-03 0.623	0.10	mg/l		Prepared: 01/11/18 Analyzed: 01/13/18 0.250	0.357	107	90-110	0.03	15
Batch: W8A0663 - SM 2540D										
Blank (W8A0663-BLK1) Total Suspended Solids	ND	5	mg/l		Prepared & Analyzed: 01/11/18					
LCS (W8A0663-BS1) Total Suspended Solids	50.0	5	mg/l		Prepared & Analyzed: 01/11/18 54.5	92	90-110			



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0663 - SM 2540D (Continued)										
Duplicate (W8A0663-DUP1)										
Total Suspended Solids	Source: 8A09128-01 67.0	5	mg/l		Prepared & Analyzed: 01/11/18 65.0			3	20	
Duplicate (W8A0663-DUP2)										
Total Suspended Solids	Source: 8A09129-01 62.0	5	mg/l		Prepared & Analyzed: 01/11/18 67.0			8	20	
Batch: W8A0773 - EPA 365.1										
Blank (W8A0773-BLK1)										
Phosphorus, Dissolved	ND	0.010	mg/l		Prepared: 01/12/18 Analyzed: 01/15/18					
LCS (W8A0773-BS1)										
Phosphorus, Dissolved	0.0503	0.010	mg/l		Prepared: 01/12/18 Analyzed: 01/15/18 0.0500	101	90-110			
Matrix Spike (W8A0773-MS1)										
Phosphorus, Dissolved	Source: 8A09143-01 0.0742	0.010	mg/l		Prepared: 01/12/18 Analyzed: 01/15/18 0.0500	0.0225	103	90-110		
Matrix Spike (W8A0773-MS2)										
Phosphorus, Dissolved	Source: 8A09143-06 0.226	0.020	mg/l		Prepared: 01/12/18 Analyzed: 01/15/18 0.0500	0.181	90	90-110		
Matrix Spike Dup (W8A0773-MSD1)										
Phosphorus, Dissolved	Source: 8A09143-01 0.0749	0.010	mg/l		Prepared: 01/12/18 Analyzed: 01/15/18 0.0500	0.0225	105	90-110	0.9	20
Matrix Spike Dup (W8A0773-MSD2)										
Phosphorus, Dissolved	Source: 8A09143-06 0.234	0.020	mg/l		Prepared: 01/12/18 Analyzed: 01/15/18 0.0500	0.181	106	90-110	3	20
Batch: W8A0894 - EPA 365.1										
Blank (W8A0894-BLK1)										
Phosphorus as P, Total	ND	0.010	mg/l		Prepared: 01/15/18 Analyzed: 01/18/18					
Blank (W8A0894-BLK2)										
Phosphorus as P, Total	ND	0.010	mg/l		Prepared: 01/15/18 Analyzed: 01/22/18					
LCS (W8A0894-BS1)										
Phosphorus as P, Total	0.0518	0.010	mg/l		Prepared: 01/15/18 Analyzed: 01/18/18 0.0500	104	90-110			
LCS (W8A0894-BS2)										
Phosphorus as P, Total	0.0506	0.010	mg/l		Prepared: 01/15/18 Analyzed: 01/22/18 0.0500	101	90-110			
Duplicate (W8A0894-DUP1)										
Phosphorus as P, Total	Source: 8A10123-01 0.657	0.10	mg/l		Prepared: 01/15/18 Analyzed: 01/22/18 0.708			7	20	
Matrix Spike (W8A0894-MS1)										
Phosphorus as P, Total	Source: 8A10123-01 1.23	0.10	mg/l		Prepared: 01/15/18 Analyzed: 01/18/18 0.500	0.708	104	90-110		
Matrix Spike (W8A0894-MS2)										
Phosphorus as P, Total	Source: 8A10128-01 1.18	0.10	mg/l		Prepared: 01/15/18 Analyzed: 01/18/18 0.500	0.643	107	90-110		
Matrix Spike (W8A0894-MS3)										
Phosphorus as P, Total	Source: 8A10123-01 1.19	0.10	mg/l		Prepared: 01/15/18 Analyzed: 01/22/18 0.500	0.708	96	90-110		
Matrix Spike Dup (W8A0894-MSD1)										
Phosphorus as P, Total	Source: 8A10123-01 1.22	0.10	mg/l		Prepared: 01/15/18 Analyzed: 01/18/18 0.500	0.708	102	90-110	0.8	20
Matrix Spike Dup (W8A0894-MSD2)										
	Source: 8A10128-01				Prepared: 01/15/18 Analyzed: 01/18/18					



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0894 - EPA 365.1 (Continued)										
Matrix Spike Dup (W8A0894-MSD2)										
Phosphorus as P, Total										
Source: 8A10128-01 Prepared: 01/15/18 Analyzed: 01/18/18										
1.15 0.10 mg/l 0.500 0.643 101 90-110 3 20										
Matrix Spike Dup (W8A0894-MSD3)										
Phosphorus as P, Total										
Source: 8A10123-01 Prepared: 01/15/18 Analyzed: 01/22/18										
1.17 0.10 mg/l 0.500 0.708 92 90-110 2 20										
Metals by EPA 200 Series Methods										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0658 - EPA 200.7										
Blank (W8A0658-BLK1)										
Calcium, Total										
ND 0.100 mg/l										
LCS (W8A0658-BS1)										
Calcium, Total										
52.2 0.100 mg/l 50.2 104 85-115										
Matrix Spike (W8A0658-MS1)										
Calcium, Total										
134 0.100 mg/l 50.2 80.3 107 70-130										
Matrix Spike (W8A0658-MS2)										
Calcium, Total										
181 0.100 mg/l 50.2 134 95 70-130										
Matrix Spike Dup (W8A0658-MSD1)										
Calcium, Total										
132 0.100 mg/l 50.2 80.3 102 70-130 2 30										
Matrix Spike Dup (W8A0658-MSD2)										
Calcium, Total										
184 0.100 mg/l 50.2 134 100 70-130 2 30										
Batch: W8A0660 - EPA 200.8										
Blank (W8A0660-BLK1)										
Copper, Total										
ND 0.50 ug/l										
LCS (W8A0660-BS1)										
Copper, Total										
50.8 0.50 ug/l 50.0 102 85-115										
Matrix Spike (W8A0660-MS1)										
Copper, Total										
163 0.50 ug/l 50.0 114 98 70-130										
Matrix Spike Dup (W8A0660-MSD1)										
Copper, Total										
166 0.50 ug/l 50.0 114 104 70-130 2 30										



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Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Pyrethroid Pesticides by EPA 8270M

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0893 - EPA 8270M										
Blank (W8A0893-BLK1)										
Allethrin	ND	2.0	ng/l							
Bifenthrin	ND	2.0	ng/l							
Cyfluthrin	ND	2.0	ng/l							
Cypermethrin	ND	2.0	ng/l							
Deltamethrin/Tralomethrin	ND	2.0	ng/l							
Desulfinylfipronil	ND	2.0	ng/l							
Dichloran	ND	2.0	ng/l							
Fenpropathrin (Danitol)	ND	2.0	ng/l							
Fenvalerate/Esfenvalerate	ND	2.0	ng/l							
Fipronil	ND	2.0	ng/l							
Fipronil sulfide	ND	2.0	ng/l							
Fipronil sulfone	ND	2.0	ng/l							
L-Cyhalothrin	ND	2.0	ng/l							
Pendimethalin	ND	2.0	ng/l							
Permethrin	ND	5.0	ng/l							
Prallethrin	ND	2.0	ng/l							
Sumithrin (Phenothrin)	ND	10	ng/l							
Tefluthrin	ND	2.0	ng/l							
<i>Surrogate(s)</i>										
<i>Perlyene-d12</i>	211	ng/l		250		84	2-205			
<i>Triphenyl phosphate</i>	224	ng/l		250		89	6-222			
LCS (W8A0893-BS1)										
Allethrin	49.7	2.0	ng/l	50.0		99	50-150			
Bifenthrin	45.2	2.0	ng/l	50.0		90	50-150			
Cyfluthrin	37.6	2.0	ng/l	50.0		75	50-150			
Cypermethrin	40.9	2.0	ng/l	50.0		82	50-150			
Deltamethrin/Tralomethrin	40.8	2.0	ng/l	50.0		82	50-150			
Desulfinylfipronil	38.5	2.0	ng/l	50.0		77	50-150			
Dichloran	38.7	2.0	ng/l	50.0		77	50-150			
Fenpropathrin (Danitol)	43.4	2.0	ng/l	50.0		87	50-150			
Fenvalerate/Esfenvalerate	42.9	2.0	ng/l	50.0		86	50-150			
Fipronil	47.4	2.0	ng/l	50.0		95	50-150			
Fipronil sulfide	48.4	2.0	ng/l	50.0		97	50-150			
Fipronil sulfone	50.3	2.0	ng/l	50.0		101	50-150			
L-Cyhalothrin	35.2	2.0	ng/l	50.0		70	50-150			
Pendimethalin	43.8	2.0	ng/l	50.0		88	50-150			
Permethrin	48.8	5.0	ng/l	50.0		98	50-150			

8A09125

Page 29 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:

02/13/2018 12:25

 Quality Control Results

(Continued)

Pyrethroid Pesticides by EPA 8270M (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A0893 - EPA 8270M (Continued)										
LCS (W8A0893-BS1)										
Prallethrin	54.1	2.0	ng/l	50.0		108	50-150			
Sumithrin (Phenothrin)	57.5	10	ng/l	50.0		115	50-150			
Tefluthrin	36.4	2.0	ng/l	50.0		73	50-150			
<i>Surrogate(s)</i>										
Perylene-d12		207	ng/l	250		83	2-205			
Triphenyl phosphate		223	ng/l	250		89	6-222			
LCS Dup (W8A0893-BSD1)										
Allethrin	47.3	2.0	ng/l	50.0		95	50-150	5	50	
Bifenthrin	52.2	2.0	ng/l	50.0		104	50-150	14	50	
Cyfluthrin	47.4	2.0	ng/l	50.0		95	50-150	23	50	
Cypermethrin	52.0	2.0	ng/l	50.0		104	50-150	24	50	
Deltamethrin/Tralomethrin	57.7	2.0	ng/l	50.0		115	50-150	34	50	
Desulfinylfipronil	40.0	2.0	ng/l	50.0		80	50-150	4	50	
Dichloran	38.6	2.0	ng/l	50.0		77	50-150	0.3	50	
Fenpropathrin (Danitol)	54.3	2.0	ng/l	50.0		109	50-150	22	50	
Fenvalerate/Esfenvalerate	57.8	2.0	ng/l	50.0		116	50-150	30	50	
Fipronil	49.7	2.0	ng/l	50.0		99	50-150	5	50	
Fipronil sulfide	47.8	2.0	ng/l	50.0		96	50-150	1	50	
Fipronil sulfone	57.4	2.0	ng/l	50.0		115	50-150	13	50	
L-Cyhalothrin	43.3	2.0	ng/l	50.0		87	50-150	21	50	
Pendimethalin	45.3	2.0	ng/l	50.0		91	50-150	3	50	
Permethrin	59.8	5.0	ng/l	50.0		120	50-150	20	50	
Prallethrin	59.9	2.0	ng/l	50.0		120	50-150	10	50	
Sumithrin (Phenothrin)	69.8	10	ng/l	50.0		140	50-150	19	50	
Tefluthrin	36.4	2.0	ng/l	50.0		73	50-150	0.1	50	
<i>Surrogate(s)</i>										
Perylene-d12		233	ng/l	250		93	2-205			
Triphenyl phosphate		243	ng/l	250		97	6-222			



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:

02/13/2018 12:25

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A1020 - EPA 525.2M										
Blank (W8A1020-BLK1)										
Prepared: 01/17/18 Analyzed: 02/02/18										
Azinphos methyl (Guthion)	ND	10	ng/l							
Bolstar	ND	10	ng/l							
Chlorpyrifos	ND	10	ng/l							
Coumaphos	ND	10	ng/l							
Demeton-o	ND	10	ng/l							
Demeton-s	ND	10	ng/l							
Diazinon	ND	10	ng/l							
Dichlorvos	ND	10	ng/l							
Disulfoton	ND	10	ng/l							
Ethoprop	ND	10	ng/l							
Ethyl parathion	ND	10	ng/l							
Fensulfothion	ND	10	ng/l							
Fenthion	ND	10	ng/l							
Malathion	ND	10	ng/l							
Merphos	ND	10	ng/l							
Methyl parathion	ND	10	ng/l							
Mevinphos	ND	10	ng/l							
Naled	ND	10	ng/l							
Phorate	ND	10	ng/l							
Ronnel	ND	10	ng/l							
Stirophos	ND	10	ng/l							
Tokuthion (Prothifos)	ND	10	ng/l							
Trichloronate	ND	10	ng/l							
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene		479	ng/l	500		96	76-128			
Triphenyl phosphate		547	ng/l	500		109	40-163			
Blank (W8A1020-BLK2)										
Dimethoate	ND	10	ng/l							QC-2
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene		459	ng/l	500		92	76-128			QC-2
Triphenyl phosphate		614	ng/l	500		123	40-163			QC-2
LCS (W8A1020-BS1)										
Prepared: 01/17/18 Analyzed: 02/02/18										
Azinphos methyl (Guthion)	44.8	10	ng/l	50.0		90	0.1-188			
Bolstar	34.6	10	ng/l	50.0		69	11-166			
Chlorpyrifos	66.3	10	ng/l	50.0		133	37-169			
Coumaphos	36.9	10	ng/l	50.0		74	0.1-225			
Demeton-o	76.6	10	ng/l	50.0		153	0.1-211			
Demeton-s	51.2	10	ng/l	50.0		102	0.1-213			

8A09125

Page 31 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A1020 - EPA 525.2M (Continued)										
LCS (W8A1020-BS1)				Prepared: 01/17/18 Analyzed: 02/02/18						
Diazinon	69.8	10	ng/l	50.0		140	43-152			
Dichlorvos	50.0	10	ng/l	50.0		100	46-133			
Disulfoton	53.2	10	ng/l	50.0		106	0.1-212			
Ethoprop	61.3	10	ng/l	50.0		123	53-163			
Ethyl parathion	75.6	10	ng/l	50.0		151	7-230			
Fensulfothion	35.6	10	ng/l	50.0		71	0.1-265			
Fenthion	74.4	10	ng/l	50.0		149	20-177			
Malathion	86.2	10	ng/l	50.0		172	14-175			
Merphos	46.4	10	ng/l	50.0		93	28-181			
Methyl parathion	74.5	10	ng/l	50.0		149	0.1-252			
Mevinphos	57.2	10	ng/l	50.0		114	14-202			
Naled	42.5	10	ng/l	50.0		85	0.1-240			
Phorate	55.6	10	ng/l	50.0		111	26-180			
Ronnel	60.2	10	ng/l	50.0		120	34-154			
Stirophos	98.9	10	ng/l	50.0		198	0.1-188			Q-ME
Tokuthion (Prothifos)	32.4	10	ng/l	50.0		65	23-159			
Trichloronate	65.0	10	ng/l	50.0		130	34-153			
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene		480	ng/l	500		96	76-128			
<i>Triphenyl phosphate</i>		541	ng/l	500		108	40-163			
LCS (W8A1020-BS2)				Prepared: 01/17/18 Analyzed: 02/06/18						
Dimethoate	72.1	10	ng/l	50.0		144	10-234			
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene		452	ng/l	500		90	76-128			
<i>Triphenyl phosphate</i>		587	ng/l	500		117	40-163			
Matrix Spike (W8A1020-MS1)				Source: 8A09185-02 Prepared: 01/17/18 Analyzed: 02/02/18						
Azinphos methyl (Guthion)	48.4	10	ng/l	50.0	ND	97	0.1-154			
Bolstar	36.6	10	ng/l	50.0	ND	73	4-184			
Chlorpyrifos	50.5	10	ng/l	50.0	ND	101	37-168			
Coumaphos	49.4	10	ng/l	50.0	ND	99	0.1-203			
Demeton-o	55.2	10	ng/l	50.0	ND	110	0.1-208			
Demeton-s	41.5	10	ng/l	50.0	ND	83	0.1-207			
Diazinon	48.2	10	ng/l	50.0	8.29	80	36-153			
Dichlorvos	39.4	10	ng/l	50.0	ND	79	42-137			
Disulfoton	46.2	10	ng/l	50.0	ND	92	12-199			
Ethoprop	51.5	10	ng/l	50.0	ND	103	51-167			
Ethyl parathion	52.2	10	ng/l	50.0	ND	104	5-229			
Fensulfothion	29.4	10	ng/l	50.0	ND	59	0.1-316			

8A09125

Page 32 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

02/13/2018 12:25

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A1020 - EPA 525.2M (Continued)										
Matrix Spike (W8A1020-MS1)										
Source: 8A09185-02 Prepared: 01/17/18 Analyzed: 02/02/18										
Fenthion	54.7	10	ng/l	50.0	ND	109	23-169			
Malathion	58.1	10	ng/l	50.0	ND	116	6-184			
Merphos	51.7	10	ng/l	50.0	ND	103	3-210			
Methyl parathion	47.7	10	ng/l	50.0	ND	95	0.1-249			
Mevinphos	46.9	10	ng/l	50.0	ND	94	25-189			
Naled	33.6	10	ng/l	50.0	ND	67	0.1-242			
Phorate	47.5	10	ng/l	50.0	ND	95	31-181			
Ronnel	47.9	10	ng/l	50.0	ND	96	29-153			
Stiropbos	65.0	10	ng/l	50.0	ND	130	0.1-167			
Tokuthion (Prothiosfos)	33.9	10	ng/l	50.0	ND	68	27-160			
Trichloronate	50.5	10	ng/l	50.0	ND	101	40-150			
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene			438	ng/l	500		88	76-128		
<i>Triphenyl phosphate</i>			498	ng/l	500		100	40-163		
Matrix Spike (W8A1020-MS2)										
Source: 8A09185-02 Prepared: 01/17/18 Analyzed: 02/06/18										
Dimethoate	30.0	10	ng/l	50.0	ND	60	4-222			QC-2
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene			409	ng/l	500		82	76-128		QC-2
<i>Triphenyl phosphate</i>			523	ng/l	500		105	40-163		QC-2
Matrix Spike Dup (W8A1020-MSD1)										
Source: 8A09185-02 Prepared: 01/17/18 Analyzed: 02/02/18										
Azinphos methyl (Guthion)	36.3	10	ng/l	50.0	ND	73	0.1-154	28	30	
Bolstar	30.3	10	ng/l	50.0	ND	61	4-184	19	30	
Chlorpyrifos	63.7	10	ng/l	50.0	ND	127	37-168	23	30	
Coumaphos	29.5	10	ng/l	50.0	ND	59	0.1-203	51	30	MS-05
Demeton-o	76.1	10	ng/l	50.0	ND	152	0.1-208	32	30	MS-05
Demeton-s	56.8	10	ng/l	50.0	ND	114	0.1-207	31	30	MS-05
Diazinon	62.1	10	ng/l	50.0	8.29	108	36-153	25	30	
Dichlorvos	47.5	10	ng/l	50.0	ND	95	42-137	19	30	
Disulfoton	53.1	10	ng/l	50.0	ND	106	12-199	14	30	
Ethoprop	65.9	10	ng/l	50.0	ND	132	51-167	25	30	
Ethyl parathion	60.6	10	ng/l	50.0	ND	121	5-229	15	30	
Fensulfothion	34.4	10	ng/l	50.0	ND	69	0.1-316	16	30	
Fenthion	74.8	10	ng/l	50.0	ND	150	23-169	31	30	MS-05
Malathion	91.9	10	ng/l	50.0	ND	184	6-184	45	30	MS-05
Merphos	34.5	10	ng/l	50.0	ND	69	3-210	40	30	MS-05
Methyl parathion	65.6	10	ng/l	50.0	ND	131	0.1-249	32	30	MS-05
Mevinphos	58.8	10	ng/l	50.0	ND	118	25-189	22	30	
Naled	49.4	10	ng/l	50.0	ND	99	0.1-242	38	30	MS-05

8A09125

Page 33 of 35



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
02/13/2018 12:25

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8A1020 - EPA 525.2M (Continued)										
Matrix Spike Dup (W8A1020-MSD1)										
Source: 8A09185-02 Prepared: 01/17/18 Analyzed: 02/02/18										
Phorate	55.5	10	ng/l	50.0	ND	111	31-181	16	30	
Ronnel	59.9	10	ng/l	50.0	ND	120	29-153	22	30	
Stirophos	81.2	10	ng/l	50.0	ND	162	0.1-167	22	30	
Tokuthion (Prothiosfos)	29.5	10	ng/l	50.0	ND	59	27-160	14	30	
Trichloronate	59.5	10	ng/l	50.0	ND	119	40-150	16	30	
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene			438	ng/l	500		88	76-128		
<i>Triphenyl phosphate</i>			597	ng/l	500		119	40-163		
Matrix Spike Dup (W8A1020-MSD2)										
Source: 8A09185-02 Prepared: 01/17/18 Analyzed: 02/06/18										
Dimethoate	61.8	10	ng/l	50.0	ND	124	4-222	69	30	MS-05, QC-2
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene			410	ng/l	500		82	76-128		QC-2
<i>Triphenyl phosphate</i>			637	ng/l	500		127	40-163		QC-2



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:

02/13/2018 12:25

Notes and Definitions

Item	Definition
**	The recommended holding time for field filtering is only 15 minutes. The sample was filtered as soon as possible but it was filtered past holding time. However, the sample was analyzed within holding time.
M-04	Due to the nature of matrix interferences, sample extract was diluted prior to analysis. The MDL and MRL were raised due to the dilution.
M-06	Due to the high concentration of analyte inherent in the sample, sample was diluted prior to preparation. The MDL and MRL were raised due to this dilution.
MS-05	The spike recovery and/or RPD were outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QC-2	This QC sample was reanalyzed to complement samples that require re-analysis on different date. See analysis date.
Q-ME	Acceptable QC with marginal exceedance
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
R-03	The RPD is not applicable for result below the reporting limit (either ND or J value).
S-GC	Surrogate recovery outside of control limits due to a possible matrix effect. The data was accepted based on valid recovery of the remaining surrogate.
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Source	Sample that was matrix spiked or duplicated.
MDL	Method Detection Limit
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ) and Detection Limit for Reporting (DLR)
MDA	Minimum Detectable Activity
NR	Not Reportable
TIC	Tentatively Identified Compound (TIC) using mass spectrometry. The reported concentration is relative concentration based on the nearest internal standard. If the library search produces no matches at, or above 85%, the compound is reported as unknown.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California State Water Resources Control Board (SWRCB)

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS 002.



1891 Goodyear Ave., Suite 621
Ventura, CA 93003
Tel 855-682-1802 • www.pacrl.com

CHAIN OF CUSTODY RECORD

CLIENT NAME / BILL TO:
Pacific Ridgeline

ADDRESS:
1891 Goodyear Ave., Suite 621
Ventura Ca, 93003

PHONE:
(855) 682-1802 Ext. 101

EMAIL:
bryn@pacrl.com

PROJECT:
LA Irrigated Lands Group (LAILG) - NGA
ADDRESS:
PO#:

SAMPLER:
Scott Jordan

PROJECT MANAGER:
Bryn Home

Page 1 Of 1

ANALYSES REQUESTED

SPECIAL HANDLING

- STANDARD
 24 Hour Rush
 48-72 Hour Rush
 4 - 5 Day Rush
 EDF

SAMPLE ID# DATE SAMPLED TIME SAMPLED SMPL TYPE SAMPLE DESCRIPTION/SITE LOCATION # OF CONT.

COMMENTS:

LAILG-NGA-184-4 1/9/18 0535 RW North Lot West of Main entrance.

X

X

X

X

X

X

X

X

X

X

LAILG-NGA-184-5 1/9/18 6:45 driveway on Mackay

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

LAILG-NGA-184-9 1/9/18 0830 Rec Cosner's Property

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

LAILG-NGA-184-2 1/10/18 12:00 Entrance Gate

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

RELINQUISHED BY:

DATE / TIME:

RECEIVED BY:

SAMPLE CONDITION:

SAMPLE TYPE CODE:

Actual Temperature:

Received On Ice

Preserved

Evidence Seals Present

Container Attacked

Preserved at Lab

Y / N

SO = Soil

SW = Solid Waste

OL = Oil

OT = Other Matrix

RELINQUISHED BY:

DATE / TIME:

RECEIVED BY:

SAMPLE CONDITION:

Actual Temperature:

Received On Ice

Preserved

Evidence Seals Present

Container Attacked

Preserved at Lab

Y / N

SO = Soil

SW = Solid Waste

OL = Oil

OT = Other Matrix



February 9, 2018

Mr. Bryn Home
Pacific Ridgeline
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Dear Mr. Home:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* EPA-821-R-02-013. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

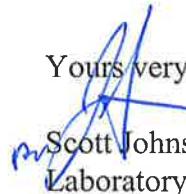
CLIENT: Pacific Ridgeline
SAMPLE I.D.: LAILG-NGA-184-4
DATE RECEIVED: 10 Jan -18
ABC LAB. NO.: PRI0118.093

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL	NOEC =	100.00 %
	TUc =	1.00
	EC25 =	N/A
	EC50 =	N/A %

REPRODUCTION	NOEC =	100.00 %
	TUc =	1.00
	IC25 =	N/A
	IC50 =	N/A

Yours very truly,



Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 07 Feb-18 15:44 (p 1 of 1)
 Test Code: PRI0118.093cer | 08-7868-0675

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	05-8390-1315	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:44	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:45	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	12-2662-6318	Code:	PRI0118.093c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 05:35	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	34h (13.4 °C)	Station:	LAILG-NGA-184-4		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result	
18-9122-9567	7d Survival Rate	Fisher Exact Test	1.0000	100% passed 7d survival rate	
11-3452-2243	Reproduction	Equal Variance t Two-Sample Test	0.6808	100% passed reproduction	

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
18-9122-9567	7d Survival Rate	Control Resp	1	0.8	>>	Yes	Passes Criteria	
11-3452-2243	Reproduction	Control Resp	26.8	15	>>	Yes	Passes Criteria	

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
100		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	26.8	21.79	31.81	17	40	2.215	7.005	26.14%	0.00%
100		10	28.5	22.21	34.79	13	46	2.782	8.797	30.87%	-6.34%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	26	21	40	36	17	27	28	25	20
100		28	46	28	22	27	13	38	30	25	28

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

CETIS Analytical Report

Report Date: 07 Feb-18 15:44 (p 1 of 2)
 Test Code: PRI0118.093cer | 08-7868-0675

Ceriodaphnia 7-d Survival and Reproduction Test							Aquatic Bioassay & Consulting Labs, Inc.								
Analysis ID:	11-3452-2243	Endpoint:	Reproduction			CETIS Version:	CETISv1.9.2								
Analyzed:	05 Feb-18 9:31	Analysis:	Parametric-Two Sample			Official Results:	Yes								
Batch ID:	05-8390-1315	Test Type:	Reproduction-Survival (7d)			Analyst:									
Start Date:	10 Jan-18 15:44	Protocol:	EPA/821/R-02-013 (2002)			Diluent:	Laboratory Water								
Ending Date:	17 Jan-18 13:45	Species:	Ceriodaphnia dubia			Brine:	Not Applicable								
Duration:	6d 22h	Source:	Aquatic Biosystems, CO			Age:									
Sample ID:	12-2662-6318	Code:	PRI0118.093c			Client:	Pacific Ridgeline, Inc.								
Sample Date:	09 Jan-18 05:35	Material:	Sample Water			Project:	LA Irrigated Lands Group (LAILG)-NG								
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report			Station:	LAILG-NGA-184-4								
Data Transform	Alt Hyp			Comparison Result					PMSD						
Untransformed	C > T			100% passed reproduction					23.01%						
Equal Variance t Two-Sample Test															
Control	vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision($\alpha:5\%$)						
Negative Control		100	-0.4781	1.734	6.166	18	CDF	0.6808	Non-Significant Effect						
Test Acceptability Criteria															
TAC Limits															
Attribute	Test Stat	Lower	Upper	Overlap	Decision										
Control Resp	26.8	15	>>	Yes	Passes Criteria										
ANOVA Table															
Source	Sum Squares		Mean Square		DF	F Stat	P-Value	Decision($\alpha:5\%$)							
Between	14.45		14.45		1	0.2285	0.6384	Non-Significant Effect							
Error	1138.1		63.2278		18										
Total	1152.55				19										
Distributional Tests															
Attribute	Test			Test Stat	Critical	P-Value	Decision($\alpha:1\%$)								
Variances	Levene Equality of Variance Test			0.0783	8.285	0.7828	Equal Variances								
Variances	Mod Levene Equality of Variance Test			0.0382	8.285	0.8472	Equal Variances								
Variances	Variance Ratio F Test			1.577	6.541	0.5079	Equal Variances								
Distribution	Anderson-Darling A2 Normality Test			0.7389	3.878	0.0540	Normal Distribution								
Distribution	D'Agostino Kurtosis Test			0.9059	2.576	0.3650	Normal Distribution								
Distribution	D'Agostino Skewness Test			0.9763	2.576	0.3289	Normal Distribution								
Distribution	D'Agostino-Pearson K2 Omnibus Test			1.774	9.21	0.4119	Normal Distribution								
Distribution	Kolmogorov-Smirnov D Test			0.2232	0.2235	0.0102	Normal Distribution								
Distribution	Shapiro-Wilk W Normality Test			0.9428	0.866	0.2703	Normal Distribution								
Reproduction Summary															
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect				
0	N	10	26.8	21.79	31.81	26.5	17	40	2.215	26.14%	0.00%				
100		10	28.5	22.21	34.79	28	13	46	2.782	30.87%	-6.34%				
Reproduction Detail															
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10				
0	N	28	26	21	40	36	17	27	28	25	20				
100		28	46	28	22	27	13	38	30	25	28				

CETIS Analytical Report

Report Date: 07 Feb-18 15:44 (p 2 of 2)
Test Code: PRI0118.093cer | 08-7868-0675

Ceriodaphnia 7-d Survival and Reproduction Test

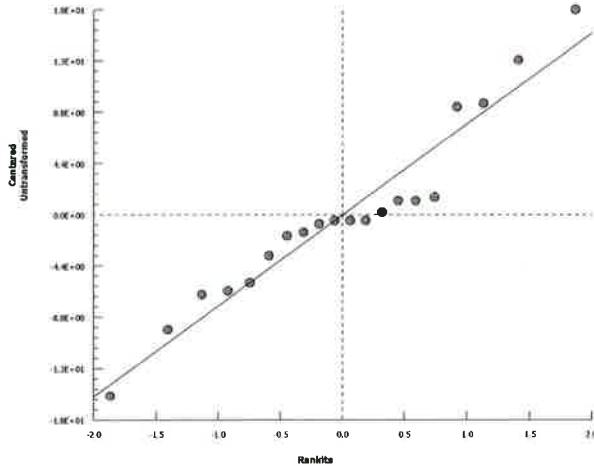
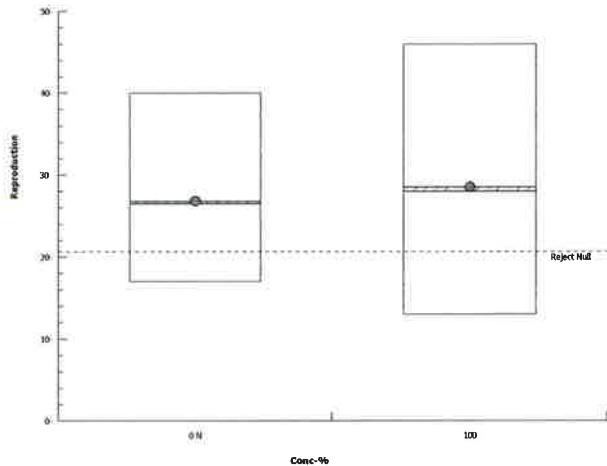
Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 11-3452-2243
Analyzed: 05 Feb-18 9:31

Endpoint: Reproduction
Analysis: Parametric-Two Sample

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 07 Feb-18 15:44 (p 1 of 1)
Test Code: PRI0118.093cer | 08-7868-0675

Ceriodaphnia 7-d Survival and Reproduction Test Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	18-9122-9567	Endpoint:	7d Survival Rate	CETIS Version:	CETISv1.9.2
Analyzed:	05 Feb-18 9:31	Analysis:	Single 2x2 Contingency Table	Official Results:	Yes
Batch ID:	05-8390-1315	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:44	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:45	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	12-2662-6318	Code:	PRI0118.093c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 05:35	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	34h (13.4 °C)	Station:	LAILG-NGA-184-4		

Data Transform	Alt Hyp	Comparison Result
Untransformed	C > T	100% passed 7d survival rate

Fisher Exact Test

Control	vs	Group	Test Stat	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100	1.0000	Exact	1.0000	Non-Significant Effect

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Data Summary

Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
0	N	10	0	10	1	0	0.0%
100		10	0	10	1	0	0.0%

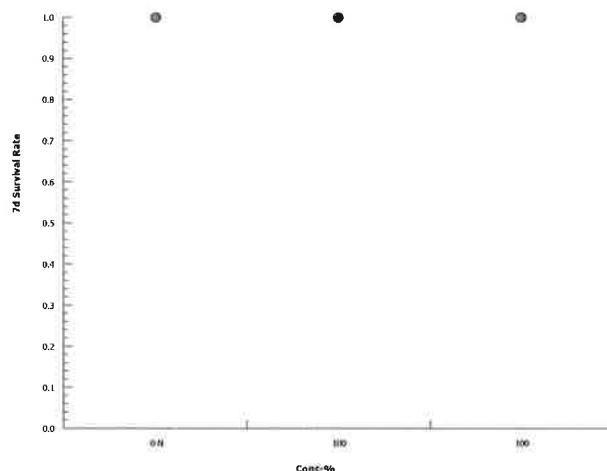
7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Graphics



CETIS Measurement Report

Report Date: 07 Feb-18 15:44 (p 1 of 2)

Test Code: PRI0118.093cer | 08-7868-0675

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID: 05-8390-1315	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 10 Jan-18 15:44	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 17 Jan-18 13:45	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 6d 22h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 12-2662-6318	Code: PRI0118.093c	Client: Pacific Ridgeline, Inc.
Sample Date: 09 Jan-18 05:35	Material: Sample Water	Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date: 10 Jan-18 12:10	Source: Bioassay Report	
Sample Age: 34h (13.4 °C)	Station: LAILG-NGA-184-4	

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	66	62.9	69.1	60	68	1.309	3.703	5.61%	0
100		8	15	15	15	15	15	0	0	0.0%	0
Overall		16	40.5	26.4	54.6	15	68	6.614	26.46	65.33%	0 (0%)

Conductivity-µhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	338.8	333.5	344	330	348	2.226	6.296	1.86%	0
100		8	129.1	24.49	233.8	40	332	44.25	125.2	96.93%	0
Overall		16	233.9	160.4	307.5	40	348	34.5	138	58.99%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.55	7.345	7.755	7.1	7.9	0.0866	0.2449	3.24%	0
100		8	7.462	6.977	7.948	6.7	8.3	0.2052	0.5805	7.78%	0
Overall		16	7.506	7.276	7.737	6.7	8.3	0.1082	0.4328	5.77%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	97.75	95.81	99.69	94	99	0.8183	2.315	2.37%	0
100		8	37	37	37	37	37	0	0	0.0%	0
Overall		16	67.38	50.64	84.11	37	99	7.853	31.41	46.62%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	8.038	7.871	8.204	7.7	8.4	0.07055	0.1996	2.48%	0
100		8	7.725	7.485	7.965	7.3	8.1	0.1013	0.2866	3.71%	0
Overall		16	7.881	7.728	8.035	7.3	8.4	0.07201	0.288	3.66%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
100		8	24.1	23.92	24.28	24	24.6	0.07559	0.2138	0.89%	0
Overall		16	24.05	23.97	24.13	24	24.6	0.03873	0.1549	0.64%	0 (0%)

CETIS Measurement ReportReport Date: 07 Feb-18 15:44 (p 2 of 2)
Test Code: PRI0118.093cer | 08-7868-0675**Ceriodaphnia 7-d Survival and Reproduction Test****Aquatic Bioassay & Consulting Labs, Inc.****Alkalinity (CaCO₃)-mg/L**

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	60	60	68	68	68	68	68	68
100		15	15	15	15	15	15	15	15

Conductivity- μ mhos

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	339	348	339	330	342	330	338	344
100		324	332	119	40	55	61	43	59

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.5	7.6	7.8	7.9	7.6	7.4	7.5	7.1
100		7.1	7.3	6.7	7.5	7.7	8.3	8.2	6.9

Hardness (CaCO₃)-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	94	94	99	99	99	99	99	99
100		37	37	37	37	37	37	37	37

pH-Units

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	8.1	8.1	7.9	8	8.4	8	8.1	7.7
100		7.4	7.7	7.8	7.7	7.7	7.3	8.1	8.1

Temperature-°C

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
100		24.6	24	24.2	24	24	24	24	24



February 9, 2018

Mr. Bryn Home
Pacific Ridgeline
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Dear Mr. Home:

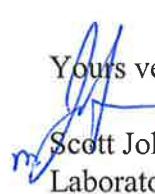
We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* EPA-821-R-02-013. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:	Pacific Ridgeline
SAMPLE I.D.:	LAILG-NGA-178-4
DATE RECEIVED:	10 Jan -18
ABC LAB. NO.:	PRI0118.094

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL	NOEC =	100.00 %
	TUc =	1.00
	EC25 =	N/A
	EC50 =	N/A %
REPRODUCTION	NOEC =	100.00 %
	TUc =	1.00
	IC25 =	N/A
	IC50 =	N/A

Yours very truly,



Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 07 Feb-18 15:45 (p 1 of 1)
 Test Code: PRI0118.094cer | 04-4741-1027

Ceriodaphnia 7-d Survival and Reproduction Test							Aquatic Bioassay & Consulting Labs, Inc.				
Batch ID:	03-6039-4479	Test Type: Reproduction-Survival (7d)					Analyst:				
Start Date:	10 Jan-18 15:45	Protocol: EPA/821/R-02-013 (2002)					Diluent: Laboratory Water				
Ending Date:	17 Jan-18 13:48	Species: Ceriodaphnia dubia					Brine: Not Applicable				
Duration:	6d 22h	Source: Aquatic Biosystems, CO					Age:				
Sample ID:	19-1539-0633	Code: PRI0118.094c					Client: Pacific Ridgeline, Inc.				
Sample Date:	09 Jan-18 06:45	Material: Sample Water					Project: LA Irrigated Lands Group (LAILG)-NG				
Receipt Date:	10 Jan-18 12:10	Source: Bioassay Report									
Sample Age:	33h (13.6 °C)	Station: LAILG-NGA-178-4									
Single Comparison Summary											
Analysis ID	Endpoint	Comparison Method					P-Value	Comparison Result			
01-3877-7801	7d Survival Rate	Fisher Exact Test					1.0000	100% passed 7d survival rate			
05-3816-7631	Reproduction	Equal Variance t Two-Sample Test					0.8073	100% passed reproduction			
Test Acceptability											
Analysis ID	Endpoint	Attribute		Test Stat	Lower	Upper	Overlap	TAC Limits Decision			
01-3877-7801	7d Survival Rate	Control Resp		1	0.8	>>	Yes	Passes Criteria			
05-3816-7631	Reproduction	Control Resp		26.8	15	>>	Yes	Passes Criteria			
7d Survival Rate Summary											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
100		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
Reproduction Summary											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	26.8	21.79	31.81	17	40	2.215	7.005	26.14%	0.00%
100		10	29.8	24.05	35.55	16	40	2.542	8.039	26.98%	-11.19%
7d Survival Rate Detail											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Reproduction Detail											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	26	21	40	36	17	27	28	25	20
100		33	17	37	16	32	40	25	35	31	32
7d Survival Rate Binomials											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

CETIS Analytical Report

Report Date: 07 Feb-18 15:45 (p 1 of 2)
 Test Code: PRI0118.094cer | 04-4741-1027

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	05-3816-7631	Endpoint:	Reproduction	CETIS Version:	CETISv1.9.2
Analyzed:	05 Feb-18 9:36	Analysis:	Parametric-Two Sample	Official Results:	Yes
Batch ID:	03-6039-4479	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:45	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:48	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	19-1539-0633	Code:	PRI0118.094c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 06:45	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	33h (13.6 °C)	Station:	LAILG-NGA-178-4		

Data Transform	Alt Hyp	Comparison Result	PMSD
Untransformed	C > T	100% passed reproduction	21.82%

Equal Variance t Two-Sample Test

Control	vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100	-0.8897	1.734	5.847	18	CDF	0.8073	Non-Significant Effect

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	26.8	15	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision($\alpha:5\%$)
Between	45	45	1	0.7916	0.3853	Non-Significant Effect
Error	1023.2	56.8444	18			
Total	1068.2		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision($\alpha:1\%$)
Variances	Levene Equality of Variance Test	0.3893	8.285	0.5405	Equal Variances
Variances	Mod Levene Equality of Variance Test	0.06367	8.285	0.8037	Equal Variances
Variances	Variance Ratio F Test	1.317	6.541	0.6883	Equal Variances
Distribution	Anderson-Darling A2 Normality Test	0.281	3.878	0.6703	Normal Distribution
Distribution	D'Agostino Kurtosis Test	0.1871	2.576	0.8515	Normal Distribution
Distribution	D'Agostino Skewness Test	0.483	2.576	0.6291	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	0.2683	9.21	0.8744	Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.1149	0.2235	0.7503	Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.9723	0.866	0.8016	Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	26.8	21.79	31.81	26.5	17	40	2.215	26.14%	0.00%
100		10	29.8	24.05	35.55	32	16	40	2.542	26.98%	-11.19%

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	26	21	40	36	17	27	28	25	20
100		33	17	37	16	32	40	25	35	31	32

CETIS Analytical Report

Report Date: 07 Feb-18 15:45 (p 2 of 2)
Test Code: PRI0118.094cer | 04-4741-1027

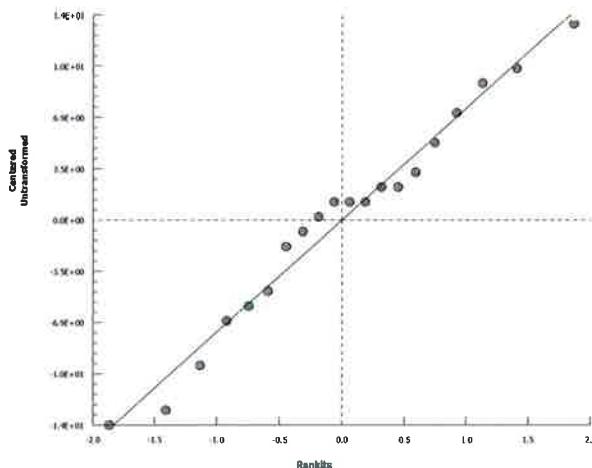
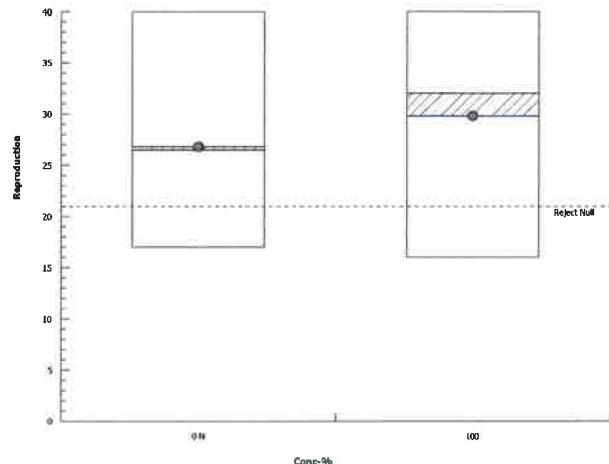
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 05-3816-7631 Endpoint: Reproduction
Analyzed: 05 Feb-18 9:36 Analysis: Parametric-Two Sample

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 07 Feb-18 15:45 (p 1 of 1)

Test Code: PRI0118.094cer | 04-4741-1027

Ceriodaphnia 7-d Survival and Reproduction Test					Aquatic Bioassay & Consulting Labs, Inc.						
Analysis ID:	01-3877-7801	Endpoint:	7d Survival Rate			CETIS Version:	CETISv1.9.2				
Analyzed:	05 Feb-18 9:36	Analysis:	Single 2x2 Contingency Table			Official Results:	Yes				
Batch ID:	03-6039-4479	Test Type:	Reproduction-Survival (7d)			Analyst:					
Start Date:	10 Jan-18 15:45	Protocol:	EPA/821/R-02-013 (2002)			Diluent:	Laboratory Water				
Ending Date:	17 Jan-18 13:48	Species:	Ceriodaphnia dubia			Brine:	Not Applicable				
Duration:	6d 22h	Source:	Aquatic Biosystems, CO			Age:					
Sample ID:	19-1539-0633	Code:	PRI0118.094c			Client:	Pacific Ridgeline, Inc.				
Sample Date:	09 Jan-18 06:45	Material:	Sample Water			Project:	LA Irrigated Lands Group (LAILG)-NG				
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report								
Sample Age:	33h (13.6 °C)	Station:	LAILG-NGA-178-4								
Data Transform	Alt Hyp	Comparison Result									
Untransformed	C > T	100% passed 7d survival rate									
Fisher Exact Test											
Control	vs	Group	Test Stat	P-Type	P-Value	Decision($\alpha:5\%$)					
Negative Control		100	1.0000	Exact	1.0000	Non-Significant Effect					
Test Acceptability Criteria			TAC Limits								
Attribute	Test Stat	Lower	Upper	Overlap	Decision						
Control Resp	1	0.8	>>	Yes	Passes Criteria						
Data Summary											
Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect				
0	N	10	0	10	1	0	0.0%				
100		10	0	10	1	0	0.0%				
7d Survival Rate Detail											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7d Survival Rate Binomials											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Graphics											

CETIS Measurement Report

Report Date: 07 Feb-18 15:45 (p 1 of 2)
Test Code: PRI0118.094cer | 04-4741-1027

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	03-6039-4479	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:45	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:48	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	19-1539-0633	Code:	PRI0118.094c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 06:45	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	33h (13.6 °C)	Station:	LAILG-NGA-178-4		

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	66	62.9	69.1	60	68	1.309	3.703	5.61%	0
100		8	18	18	18	18	18	0	0	0.0%	0
Overall		16	42	28.72	55.28	18	68	6.229	24.92	59.32%	0 (0%)

Conductivity-µmhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	338.8	333.5	344	330	348	2.226	6.296	1.86%	0
100		8	310.2	88.21	532.3	142	739	93.9	265.6	85.61%	0
Overall		16	324.5	227.5	421.5	142	739	45.52	182.1	56.11%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.55	7.345	7.755	7.1	7.9	0.0866	0.2449	3.24%	0
100		8	7.2	6.586	7.814	5.9	8.1	0.2598	0.7348	10.21%	0
Overall		16	7.375	7.077	7.673	5.9	8.1	0.1398	0.5592	7.58%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	97.75	95.81	99.69	94	99	0.8183	2.315	2.37%	0
100		8	43	43	43	43	43	0	0	0.0%	0
Overall		16	70.38	55.29	85.46	43	99	7.079	28.32	40.24%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	8.05	7.902	8.198	7.8	8.4	0.06268	0.1773	2.2%	0
100		8	7.5	7.345	7.655	7.3	7.8	0.06547	0.1852	2.47%	0
Overall		16	7.775	7.597	7.953	7.3	8.4	0.08342	0.3337	4.29%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
100		8	24.18	23.95	24.4	24	24.6	0.0959	0.2712	1.12%	0
Overall		16	24.09	23.98	24.2	24	24.6	0.05154	0.2062	0.86%	0 (0%)

CETIS Measurement ReportReport Date: 07 Feb-18 15:45 (p 2 of 2)
Test Code: PRI0118.094cer | 04-4741-1027**Ceriodaphnia 7-d Survival and Reproduction Test****Aquatic Bioassay & Consulting Labs, Inc.****Alkalinity (CaCO₃)-mg/L**

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	60	60	68	68	68	68	68	68
100		18	18	18	18	18	18	18	18

Conductivity- μ mhos

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	339	348	339	330	342	330	338	344
100		723	739	304	143	146	143	142	142

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.5	7.6	7.8	7.9	7.6	7.4	7.5	7.1
100		7.3	7.4	6.3	7.3	7.7	8.1	7.6	5.9

Hardness (CaCO₃)-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	94	94	99	99	99	99	99	99
100		43	43	43	43	43	43	43	43

pH-Units

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	8.1	8.1	7.9	8	8.4	8	8.1	7.8
100		7.5	7.6	7.4	7.3	7.4	7.3	7.7	7.8

Temperature-°C

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
100		24.6	24	24.2	24.6	24	24	24	24



February 9, 2018

Mr. Bryn Home
Pacific Ridgeline
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Dear Mr. Home:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* EPA-821-R-02-013. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:	Pacific Ridgeline
SAMPLE I.D.:	LAILG-NGA-124-9
DATE RECEIVED:	10 Jan -18
ABC LAB. NO.:	PRI0118.095

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL	NOEC =	100.00 %
	TUc =	1.00
	EC25 =	N/A
	EC50 =	N/A %

REPRODUCTION	NOEC =	100.00 %
	TUc =	1.00
	IC25 =	N/A
	IC50 =	N/A

Yours very truly,


Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 07 Feb-18 15:45 (p 1 of 1)
 Test Code: PRI0118.095cer | 05-4813-8280

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	02-4532-7554	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:46	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:52	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	16-0996-9099	Code:	PRI0118.095c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 08:30	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	31h (13.2 °C)	Station:	LAILG-NGA-124-9		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result	
20-1393-0659	7d Survival Rate	Fisher Exact Test	1.0000	100% passed 7d survival rate	
00-1805-0933	Reproduction	Equal Variance t Two-Sample Test	0.7006	100% passed reproduction	

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
20-1393-0659	7d Survival Rate	Control Resp	1	0.8	>>	Yes	Passes Criteria	
00-1805-0933	Reproduction	Control Resp	26.8	15	>>	Yes	Passes Criteria	

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
100		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	26.8	21.79	31.81	17	40	2.215	7.005	26.14%	0.00%
100		10	28.6	22.89	34.31	19	39	2.526	7.989	27.93%	-6.72%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	26	21	40	36	17	27	28	25	20
100		20	35	39	35	24	30	39	20	25	19

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

CETIS Analytical Report

Report Date: 07 Feb-18 15:45 (p 1 of 2)

Test Code: PRI0118.095cer | 05-4813-8280

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID: 00-1805-0933	Endpoint: Reproduction	CETIS Version: CETISv1.9.2
Analyzed: 05 Feb-18 10:00	Analysis: Parametric-Two Sample	Official Results: Yes
Batch ID: 02-4532-7554	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 10 Jan-18 15:46	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 17 Jan-18 13:52	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 6d 22h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 16-0996-9099	Code: PRI0118.095c	Client: Pacific Ridgeline, Inc.
Sample Date: 09 Jan-18 08:30	Material: Sample Water	Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date: 10 Jan-18 12:10	Source: Bioassay Report	
Sample Age: 31h (13.2 °C)	Station: LAILG-NGA-124-9	

Data Transform	Alt Hyp	Comparison Result	PMSD
Untransformed	C > T	100% passed reproduction	21.74%

Equal Variance t Two-Sample Test

Control	vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100	-0.5357	1.734	5.826	18	CDF	0.7006	Non-Significant Effect

Test Acceptability Criteria

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	26.8	15	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision($\alpha:5\%$)
Between	16.2	16.2	1	0.287	0.5987	Non-Significant Effect
Error	1016	56.4444	18			
Total	1032.2		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision($\alpha:1\%$)
Variances	Levene Equality of Variance Test	1.304	8.285	0.2684	Equal Variances
Variances	Mod Levene Equality of Variance Test	1.246	8.285	0.2791	Equal Variances
Variances	Variance Ratio F Test	1.301	6.541	0.7017	Equal Variances
Distribution	Anderson-Darling A2 Normality Test	0.4598	3.878	0.2657	Normal Distribution
Distribution	D'Agostino Kurtosis Test	1.456	2.576	0.1455	Normal Distribution
Distribution	D'Agostino Skewness Test	0.6468	2.576	0.5178	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	2.538	9.21	0.2812	Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.1241	0.2235	0.6031	Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.9359	0.866	0.2000	Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	26.8	21.79	31.81	26.5	17	40	2.215	26.14%	0.00%
100		10	28.6	22.89	34.31	27.5	19	39	2.526	27.93%	-6.72%

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	26	21	40	36	17	27	28	25	20
100		20	35	39	35	24	30	39	20	25	19

CETIS Analytical Report

Report Date: 07 Feb-18 15:45 (p 2 of 2)
Test Code: PRI0118.095cer | 05-4813-8280

Ceriodaphnia 7-d Survival and Reproduction Test

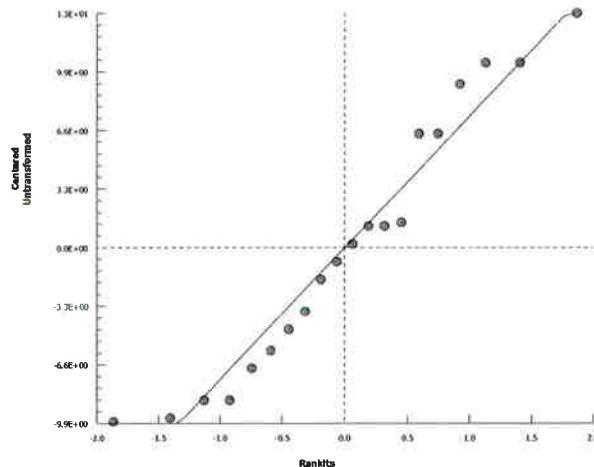
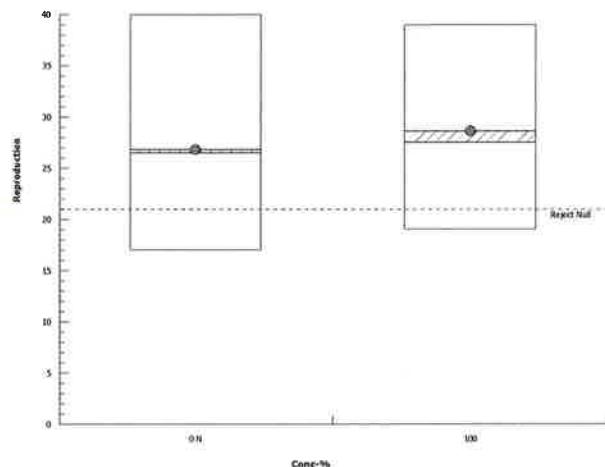
Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 00-1805-0933
Analyzed: 05 Feb-18 10:00

Endpoint: Reproduction
Analysis: Parametric-Two Sample

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 07 Feb-18 15:45 (p 1 of 1)
 Test Code: PRI0118.095cer | 05-4813-8280

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	20-1393-0659	Endpoint:	7d Survival Rate	CETIS Version:	CETISv1.9.2
Analyzed:	05 Feb-18 10:00	Analysis:	Single 2x2 Contingency Table	Official Results:	Yes
Batch ID:	02-4532-7554	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:46	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:52	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	16-0996-9099	Code:	PRI0118.095c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 08:30	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	31h (13.2 °C)	Station:	LAILG-NGA-124-9		

Data Transform	Alt Hyp	Comparison Result
Untransformed	C > T	100% passed 7d survival rate

Fisher Exact Test

Control	vs	Group	Test Stat	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100	1.0000	Exact	1.0000	Non-Significant Effect

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Data Summary

Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
0	N	10	0	10	1	0	0.0%
100		10	0	10	1	0	0.0%

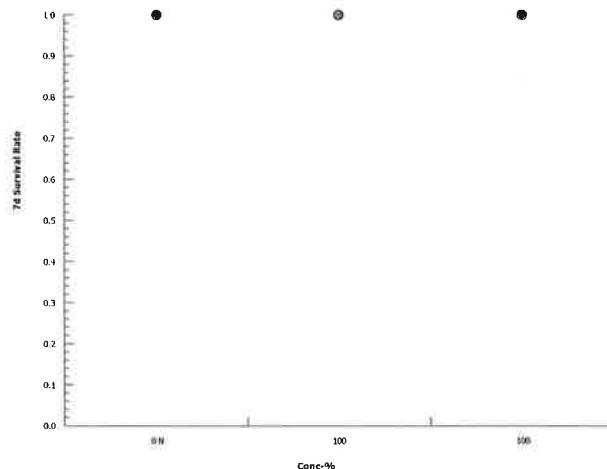
7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Graphics



CETIS Measurement Report

Report Date: 07 Feb-18 15:45 (p 1 of 2)
Test Code: PRI0118.095cer | 05-4813-8280

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	02-4532-7554	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:46	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:52	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	16-0996-9099	Code:	PRI0118.095c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 08:30	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	31h (13.2 °C)	Station:	LAILG-NGA-124-9		

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	66	62.9	69.1	60	68	1.309	3.703	5.61%	0
100		8	23	23	23	23	23	0	0	0.0%	0
Overall		16	44.5	32.59	56.41	23	68	5.587	22.35	50.22%	0 (0%)

Conductivity-µhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	338.8	333.5	344	330	348	2.226	6.296	1.86%	0
100		8	1506	522.9	2488	830	3448	415.5	1175	78.07%	0
Overall		16	922.1	387.2	1457	330	3448	251	1004	108.90%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.55	7.345	7.755	7.1	7.9	0.0866	0.2449	3.24%	0
100		8	7.088	6.545	7.63	6.3	8.1	0.2295	0.649	9.16%	0
Overall		16	7.319	7.036	7.602	6.3	8.1	0.1327	0.5307	7.25%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	97.75	95.81	99.69	94	99	0.8183	2.315	2.37%	0
100		8	146	146	146	146	146	0	0	0.0%	0
Overall		16	121.9	108.6	135.2	94	146	6.242	24.97	20.49%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	8.038	7.871	8.204	7.7	8.4	0.07055	0.1996	2.48%	0
100		8	7.325	7.209	7.441	7.1	7.5	0.0491	0.1389	1.9%	0
Overall		16	7.681	7.466	7.896	7.1	8.4	0.1009	0.4037	5.26%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
100		8	24.29	23.71	24.87	24	26	0.246	0.6958	2.87%	0
Overall		16	24.14	23.88	24.41	24	26	0.1245	0.498	2.06%	0 (0%)

CETIS Measurement ReportReport Date: 07 Feb-18 15:45 (p 2 of 2)
Test Code: PRI0118.095cer | 05-4813-8280**Ceriodaphnia 7-d Survival and Reproduction Test****Aquatic Bioassay & Consulting Labs, Inc.****Alkalinity (CaCO₃)-mg/L**

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	60	60	68	68	68	68	68	68
100		23	23	23	23	23	23	23	23

Conductivity- μ mhos

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	339	348	339	330	342	330	338	344
100		3448	3362	1064	830	834	836	836	834

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.5	7.6	7.8	7.9	7.6	7.4	7.5	7.1
100		6.3	6.3	7	6.9	7.8	8.1	7.4	6.9

Hardness (CaCO₃)-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	94	94	99	99	99	99	99	99
100		146	146	146	146	146	146	146	146

pH-Units

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	8.1	8.1	7.9	8	8.4	8	8.1	7.7
100		7.5	7.5	7.3	7.1	7.3	7.2	7.3	7.4

Temperature-°C

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
100		26	24	24.1	24.2	24	24	24	24



February 9, 2018

Mr. Bryn Home
Pacific Ridgeline
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Dear Mr. Home:

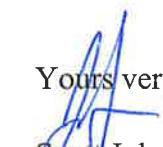
We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* EPA-821-R-02-013. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:	Pacific Ridgeline
SAMPLE I.D.:	LAILG-NGA-202-2
DATE RECEIVED:	10 Jan -18
ABC LAB. NO.:	PRI0118.096

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL	NOEC =	100.00 %
	TUc =	1.00
	EC25 =	N/A
	EC50 =	N/A %
REPRODUCTION	NOEC =	100.00 %
	TUc =	1.00
	IC25 =	N/A
	IC50 =	N/A

Yours very truly,


Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 07 Feb-18 15:46 (p 1 of 1)
 Test Code: PRI0118.096cer | 04-3195-7101

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	21-2333-7951	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:47	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:58	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	16-6040-8922	Code:	PRI0118.096c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 11:30	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	28h (13.4 °C)	Station:	LAILG-NGA-202-2		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result	
12-4211-7425	7d Survival Rate	Fisher Exact Test	1.0000	100% passed 7d survival rate	
18-3526-4958	Reproduction	Equal Variance t Two-Sample Test	0.5951	100% passed reproduction	

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
12-4211-7425	7d Survival Rate	Control Resp	1	0.8	>>	Yes	Passes Criteria	
18-3526-4958	Reproduction	Control Resp	26.8	15	>>	Yes	Passes Criteria	

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
100		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	26.8	21.79	31.81	17	40	2.215	7.005	26.14%	0.00%
100		10	27.8	20.01	35.59	14	49	3.444	10.89	39.18%	-3.73%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	26	21	40	36	17	27	28	25	20
100		49	42	19	14	18	22	27	27	32	28

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

CETIS Analytical Report

Report Date: 07 Feb-18 15:46 (p 1 of 2)
 Test Code: PRI0118.096cer | 04-3195-7101

Ceriodaphnia 7-d Survival and Reproduction Test Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 18-3526-4958	Endpoint: Reproduction	CETIS Version: CETISv1.9.2
Analyzed: 05 Feb-18 10:24	Analysis: Parametric-Two Sample	Official Results: Yes
Batch ID: 21-2333-7951	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 10 Jan-18 15:47	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 17 Jan-18 13:58	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 6d 22h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 16-6040-8922	Code: PRI0118.096c	Client: Pacific Ridgeline, Inc.
Sample Date: 09 Jan-18 11:30	Material: Sample Water	Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date: 10 Jan-18 12:10	Source: Bioassay Report	
Sample Age: 28h (13.4 °C)	Station: LAILG-NGA-202-2	

Data Transform	Alt Hyp	Comparison Result			PMSD
Untransformed	C > T	100% passed reproduction			26.50%

Equal Variance t Two-Sample Test

Control	vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100	-0.2442	1.734	7.101	18	CDF	0.5951	Non-Significant Effect

Test Acceptability Criteria **TAC Limits**

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	26.8	15	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision($\alpha:5\%$)
Between	5	5	1	0.05963	0.8098	Non-Significant Effect
Error	1509.2	83.8444	18			
Total	1514.2		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision($\alpha:1\%$)
Variances	Levene Equality of Variance Test	1.26	8.285	0.2763	Equal Variances
Variances	Mod Levene Equality of Variance Test	1.072	8.285	0.3142	Equal Variances
Variances	Variance Ratio F Test	2.418	6.541	0.2046	Equal Variances
Distribution	Anderson-Darling A2 Normality Test	0.6116	3.878	0.1127	Normal Distribution
Distribution	D'Agostino Kurtosis Test	0.6486	2.576	0.5166	Normal Distribution
Distribution	D'Agostino Skewness Test	1.574	2.576	0.1154	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	2.9	9.21	0.2346	Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.1964	0.2235	0.0417	Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.937	0.866	0.2103	Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	26.8	21.79	31.81	26.5	17	40	2.215	26.14%	0.00%
100		10	27.8	20.01	35.59	27	14	49	3.444	39.18%	-3.73%

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	26	21	40	36	17	27	28	25	20
100		49	42	19	14	18	22	27	27	32	28

CETIS Analytical Report

Report Date: 07 Feb-18 15:46 (p 2 of 2)
Test Code: PRI0118.096cer | 04-3195-7101

Caenorhabditis elegans 7-d Survival and Reproduction Test

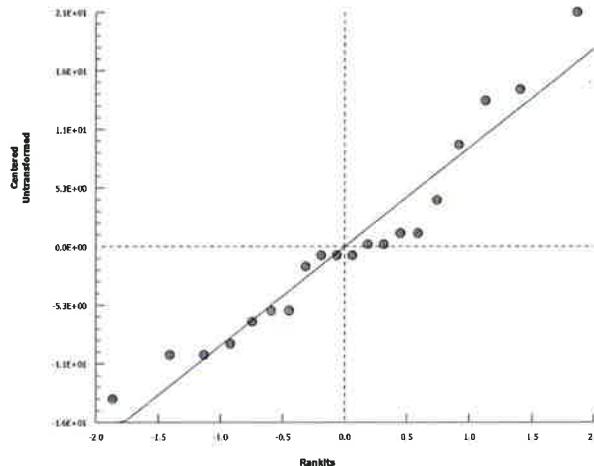
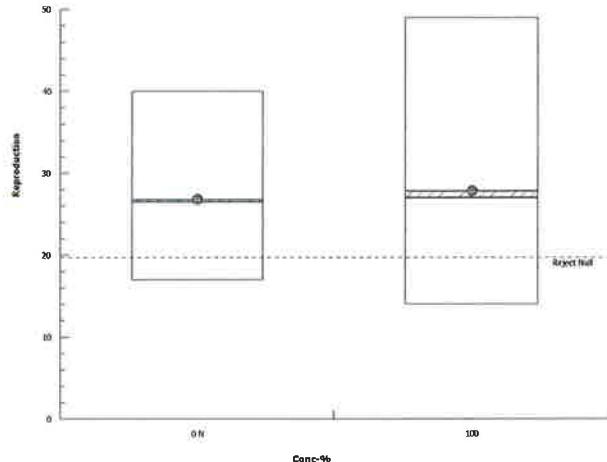
Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 18-3526-4958
Analyzed: 05 Feb-18 10:24

Endpoint: Reproduction
Analysis: Parametric-Two Sample

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 07 Feb-18 15:46 (p 1 of 1)

Test Code: PRI0118.096cer | 04-3195-7101

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	12-4211-7425	Endpoint:	7d Survival Rate	CETIS Version:	CETISv1.9.2
Analyzed:	05 Feb-18 10:24	Analysis:	Single 2x2 Contingency Table	Official Results:	Yes
Batch ID:	21-2333-7951	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	10 Jan-18 15:47	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	17 Jan-18 13:58	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	16-6040-8922	Code:	PRI0118.096c	Client:	Pacific Ridgeline, Inc.
Sample Date:	09 Jan-18 11:30	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	10 Jan-18 12:10	Source:	Bioassay Report		
Sample Age:	28h (13.4 °C)	Station:	LAILG-NGA-202-2		

Data Transform	Alt Hyp	Comparison Result
Untransformed	C > T	100% passed 7d survival rate

Fisher Exact Test

Control	vs	Group	Test Stat	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100	1.0000	Exact	1.0000	Non-Significant Effect

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Data Summary

Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
0	N	10	0	10	1	0	0.0%
100		10	0	10	1	0	0.0%

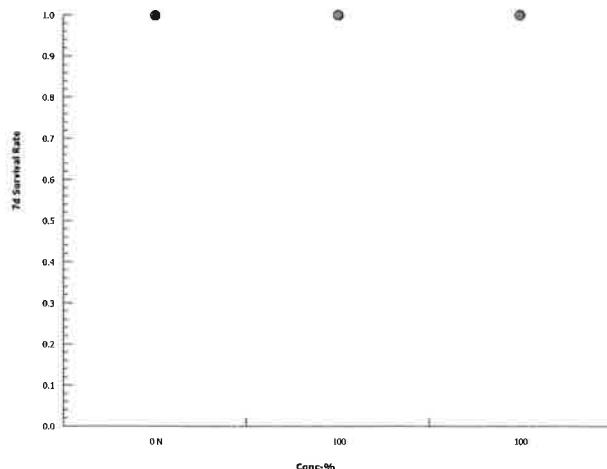
7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Graphics



CETIS Measurement Report

Report Date: 07 Feb-18 15:46 (p 1 of 2)
 Test Code: PRI0118.096cer | 04-3195-7101

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID: 21-2333-7951	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 10 Jan-18 15:47	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 17 Jan-18 13:58	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 6d 22h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 16-6040-8922	Code: PRI0118.096c	Client: Pacific Ridgeline, Inc.
Sample Date: 09 Jan-18 11:30	Material: Sample Water	Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date: 10 Jan-18 12:10	Source: Bioassay Report	
Sample Age: 28h (13.4 °C)	Station: LAILG-NGA-202-2	

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	66	62.9	69.1	60	68	1.309	3.703	5.61%	0
100		8	20	20	20	20	20	0	0	0.0%	0
Overall		16	43	30.27	55.73	20	68	5.972	23.89	55.55%	0 (0%)

Conductivity-µhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	338.8	333.5	344	330	348	2.226	6.296	1.86%	0
100		8	261.9	114.1	409.7	147	614	62.51	176.8	67.51%	0
Overall		16	300.3	232.5	368.1	147	614	31.8	127.2	42.36%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.55	7.345	7.755	7.1	7.9	0.0866	0.2449	3.24%	0
100		8	7.275	6.47	8.08	6.1	8.3	0.3406	0.9633	13.24%	0
Overall		16	7.413	7.043	7.782	6.1	8.3	0.1734	0.6937	9.36%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	97.75	95.81	99.69	94	99	0.8183	2.315	2.37%	0
100		8	51	51	51	51	51	0	0	0.0%	0
Overall		16	74.38	61.48	87.27	51	99	6.048	24.19	32.53%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	8.038	7.871	8.204	7.7	8.4	0.07055	0.1996	2.48%	0
100		8	7.55	7.441	7.659	7.4	7.7	0.04629	0.1309	1.73%	0
Overall		16	7.794	7.634	7.954	7.4	8.4	0.07498	0.2999	3.85%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
100		8	24.06	23.96	24.16	24	24.3	0.04199	0.1188	0.49%	0
Overall		16	24.03	23.98	24.08	24	24.3	0.02183	0.08732	0.36%	0 (0%)

CETIS Measurement Report

Report Date:

07 Feb-18 15:46 (p 2 of 2)

Test Code:

PRI0118.096cer | 04-3195-7101

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.****Alkalinity (CaCO₃)-mg/L**

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	60	60	68	68	68	68	68	68
100		20	20	20	20	20	20	20	20

Conductivity- μ mhos

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	339	348	339	330	342	330	338	344
100		454	614	254	154	147	150	153	169

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.5	7.6	7.8	7.9	7.6	7.4	7.5	7.1
100		8.3	6.1	6.4	7.2	7.7	8.3	8.1	6.1

Hardness (CaCO₃)-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	94	94	99	99	99	99	99	99
100		51	51	51	51	51	51	51	51

pH-Units

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	8.1	8.1	7.9	8	8.4	8	8.1	7.7
100		7.6	7.7	7.6	7.4	7.4	7.4	7.6	7.7

Temperature-°C

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
100		24	24	24.2	24.3	24	24	24	24



1891 Goodyear Ave., Suite 621

Ventura, CA 93003

CHAIN OF CUSTODY RECORD

CLIENT NAME / BILL TO:

Pacific Ridgeline

1891 Goodyear Ave., Suite 621
ADDRESS.

Ventura Ca, 93003

PHONE: (855) 682-1802 Ext. 101
EMAIL: karen@read.com

PROJECT MANAGER: www.brianjoseph.com

Bryn Home

CLIENT NAME / BILL TO:		PROJECT:		ANALYSES REQUESTED		SPECIAL HANDLING	
Pacific Ridgeline ADDRESS: 1891 Goodyear Ave., Suite 621 Ventura Ca, 93003		LA Irrigated Lands Group (LAILG) - NGA ADDRESS: 48-72 Hour Rush					
PHONE:	(855) 682-1802 Ext. 101	EMAIL:	brynn@pacrl.com	PO#:			
PROJECT MANAGER:	Brynn Home	SAMPLER:	Scott Jordan	COMMENTS:			
SAMPLE ID#	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE DESCRIPTION/SITE LOCATION	# OF CONT.	Comments:	
LAILG-NGA-184-1	1/9/18	0535	RW	North Lot, West of Main entrance	2 X	Ceriodaphnia Dubia (7Day)	
LAILG-NGA-184-1	1/9/18	06:45		Driveway Macay	X		
LAILG-NGA-184-9		0830		Reserves of Property	X		
LAILG-NGA-184-2		1130		Entrance Gate	X		
RELINQUISHED BY:		DATE / TIME:	RECEIVED BY:	SAMPLE CONDITION:	SAMPLE TYPE CODE:	STANDARD	
<i>[Signature]</i>		1/10/18 @ 12:00	Entw	Actual Temperature:	AQ=Aqueous NA= Non Aqueous SL = Sludge	24 Hour Rush	
RELINQUISHED BY:		DATE / TIME:	RECEIVED BY:	Received On Ice	Y / N	48-72 Hour Rush	
RELINQUISHED BY:		DATE / TIME:	RECEIVED BY:	Preserved	Y / N	4 - 5 Day Rush	
RELINQUISHED BY:		DATE / TIME:	RECEIVED BY:	Evidence Seals Present	Y / N	EDF	
RELINQUISHED BY:		DATE / TIME:	RECEIVED BY:	Container Attacked	Y / N		
RELINQUISHED BY:		DATE / TIME:	RECEIVED BY:	Preserved at Lab	Y / N		
RELINQUISHED BY:		DATE / TIME:	RECEIVED BY:	SO = Soil	SW = Solid Waste		
RELINQUISHED BY:		DATE / TIME:	RECEIVED BY:	OL = Oil	OT = Other Matrix		



CHRONIC CERIODAPHNIA SURVIVAL AND REPRODUCTION BIOASSAY

DATE: 09 January - 2018

STANDARD TOXICANT: Copper Chloride

ENDPOINT: SURVIVAL

NOEC = 30.00 ug/l

EC25 = 26.25 ug/l
EC50 = 35.71 ug/l

ENDPOINT: REPRODUCTION

NOEC = 30.00 ug/l

IC25 = 25.30 ug/l
IC50 = 36.67 ug/l

Yours very truly,


Scott Johnson
Laboratory Director

CETIS Summary Report

 Report Date: 26 Jan-18 09:17 (p 1 of 2)
 Test Code: CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test				Aquatic Bioassay & Consulting Labs, Inc.		
Batch ID:	12-0569-8752	Test Type:	Reproduction-Survival (7d)	Analyst:		
Start Date:	09 Jan-18 10:00	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water	
Ending Date:	16 Jan-18 12:00	Species:	Ceriodaphnia dubia	Brine:	Not Applicable	
Duration:	7d 2h	Source:	Aquatic Biosystems, CO	Age:		
Sample ID:	05-3581-9315	Code:	CER010918	Client:	ABC Labs	
Sample Date:	09 Jan-18 10:00	Material:	Copper chloride	Project:	REF TOX	
Receipt Date:		Source:	Bioassay Report			
Sample Age:	n/a	Station:	Ref Tox			

Multiple Comparison Summary

Analysis ID	Endpoint	Comparison Method	NOEL	LOEL	TOEL	TU	PMSD	✓
03-3773-3833	7d Survival Rate	Fisher Exact/Bonferroni-Holm Test	30	50	38.73		n/a	✓
08-8178-8390	Reproduction	Steel Many-One Rank Sum Test	30	50	38.73		40.6%	✓

Point Estimate Summary

Analysis ID	Endpoint	Point Estimate Method	Level	µg/L	95% LCL	95% UCL	TU	✓
16-2721-6288	7d Survival Rate	Linear Interpolation (ICPIN)	EC5	11.25	1.5	30.51		✓
			EC10	15	10	31.54		✓
			EC15	18.75	13.12	32.56		✓
			EC20	22.5	15.71	33.59		
			EC25	26.25	17.5	34.62		
			EC40	32.86	22.94	37.69		
			EC50	35.71	26.47	39.74		✓
06-3979-9151	Reproduction	Linear Interpolation (ICPIN)	IC5	13.06	11.77	19.49		
			IC10	16.12	13.54	28.98		
			IC15	19.18	15.31	31.31		
			IC20	22.24	17.08	32.7		✓
			IC25	25.3	18.85	34.04		✓
			IC40	32.82	24.16	38.53		✓
			IC50	36.67	27.7	41.52		

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
03-3773-3833	7d Survival Rate	Control Resp	1	0.8	>>	Yes		Passes Criteria
16-2721-6288	7d Survival Rate	Control Resp	1	0.8	>>	Yes		Passes Criteria
06-3979-9151	Reproduction	Control Resp	21.3	15	>>	Yes		Passes Criteria
08-8178-8390	Reproduction	Control Resp	21.3	15	>>	Yes		Passes Criteria
08-8178-8390	Reproduction	PMSD	0.4064	0.13	0.47	Yes		Passes Criteria

7d Survival Rate Summary

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
3		10	0.9000	0.6738	1.0000	0.0000	1.0000	0.1000	0.3162	35.14%	10.00%
5		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
10		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
30		10	0.7000	0.3544	1.0000	0.0000	1.0000	0.1528	0.4830	69.01%	30.00%
50		10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		100.00%

Reproduction Summary

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	21.3	17.07	25.53	12	31	1.868	5.908	27.74%	0.00%
3		10	27.7	18.34	37.06	0	43	4.137	13.08	47.23%	-30.05%
5		10	27	21.99	32.01	15	36	2.216	7.008	25.96%	-26.76%
10		10	35.7	33.57	37.83	32	41	0.9434	2.983	8.36%	-67.61%
30		10	18.8	10.55	27.05	0	36	3.648	11.54	61.36%	11.74%
50		10	4.3	0.2667	8.333	0	13	1.783	5.638	131.12%	79.81%

CETIS Summary Report

Report Date:

26 Jan-18 09:17 (p 2 of 2)

Test Code:

CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.****7d Survival Rate Detail**

Conc- $\mu\text{g/L}$	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000
5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30		1.0000	1.0000	1.0000	0.0000	1.0000	0.0000	1.0000	0.0000	1.0000	1.0000
50		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Reproduction Detail

Conc- $\mu\text{g/L}$	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	19	23	25	12	26	21	31	12	21	23
3		19	27	40	22	37	30	20	0	39	43
5		15	18	31	31	26	25	32	22	34	36
10		34	33	33	41	40	32	37	36	36	35
30		23	32	24	0	25	4	36	11	17	16
50		13	0	0	0	11	0	0	0	9	10

7d Survival Rate Binomials

Conc- $\mu\text{g/L}$	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
3		1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1
5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
10		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
30		1/1	1/1	1/1	0/1	1/1	0/1	1/1	0/1	1/1	1/1
50		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

CETIS Analytical Report

Report Date: 26 Jan-18 09:16 (p 1 of 2)
 Test Code: CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test					Aquatic Bioassay & Consulting Labs, Inc.							
Analysis ID: 08-8178-8390 Analyzed: 25 Jan-18 11:32		Endpoint: Reproduction Analysis: Nonparametric-Control vs Treatments			CETIS Version: CETISv1.9.2 Official Results: Yes							
Batch ID: 12-0569-8752	Test Type: Reproduction-Survival (7d)			Analyst:								
Start Date: 09 Jan-18 10:00	Protocol: EPA/821/R-02-013 (2002)			Diluent: Laboratory Water								
Ending Date: 16 Jan-18 12:00	Species: Ceriodaphnia dubia			Brine: Not Applicable								
Duration: 7d 2h	Source: Aquatic Biosystems, CO			Age:								
Sample ID: 05-3581-9315	Code: CER010918			Client: ABC Labs								
Sample Date: 09 Jan-18 10:00	Material: Copper chloride			Project: REF TOX								
Receipt Date:	Source: Bioassay Report											
Sample Age: n/a	Station: Ref Tox											

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU	PMSD
Untransformed	C > T	30	50	38.73		40.64%

Steel Many-One Rank Sum Test

Control	vs	Conc- μ g/L	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control	3	123.5	75	1	18	Asymp	0.9960	Non-Significant Effect	
	5	129	75	3	18	Asymp	0.9992	Non-Significant Effect	
	10	155	75	0	18	Asymp	1.0000	Non-Significant Effect	
	30	99.5	75	2	18	Asymp	0.6816	Non-Significant Effect	
	50*	57	75	0	18	Asymp	6.9E-04	Significant Effect	

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	21.3	15	>>	Yes	Passes Criteria
PMSD	0.4064	0.13	0.47	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision($\alpha:5\%$)
Between	5678.93	1135.79	5	15.89	<1.0E-37	Significant Effect
Error	3860	71.4815	54			
Total	9538.93		59			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision($\alpha:1\%$)
Variances	Bartlett Equality of Variance Test	21.5	15.09	6.5E-04	Unequal Variances
Variances	Levene Equality of Variance Test	4.145	3.377	0.0029	Unequal Variances
Variances	Mod Levene Equality of Variance Test	3.426	3.377	0.0092	Unequal Variances
Distribution	Anderson-Darling A2 Normality Test	0.402	3.878	0.3633	Normal Distribution
Distribution	D'Agostino Kurtosis Test	1.992	2.576	0.0464	Normal Distribution
Distribution	D'Agostino Skewness Test	1.945	2.576	0.0518	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	7.748	9.21	0.0208	Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.09749	0.1331	0.1590	Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.9713	0.9459	0.1697	Normal Distribution

Reproduction Summary

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	21.3	17.07	25.53	22	12	31	1.868	27.74%	0.00%
3		10	27.7	18.34	37.06	28.5	0	43	4.137	47.23%	-30.05%
5		10	27	21.99	32.01	28.5	15	36	2.216	25.96%	-26.76%
10		10	35.7	33.57	37.83	35.5	32	41	0.9434	8.36%	-67.61%
30		10	18.8	10.55	27.05	20	0	36	3.648	61.36%	11.74%
50		10	4.3	0.2667	8.333	0	0	13	1.783	131.12%	79.81%

CETIS Analytical Report

Report Date: 26 Jan-18 09:16 (p 2 of 2)
Test Code: CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 08-8178-8390
Analyzed: 25 Jan-18 11:32

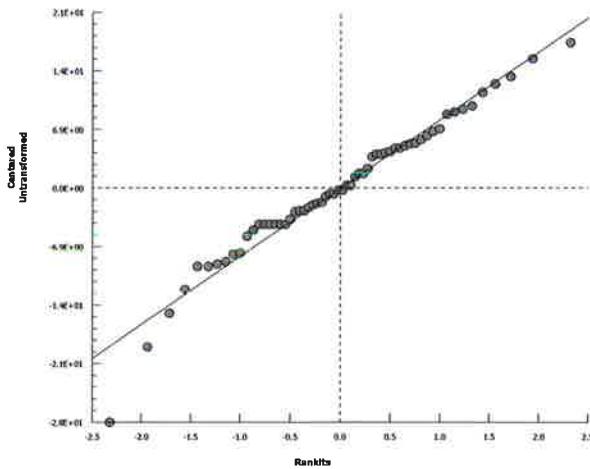
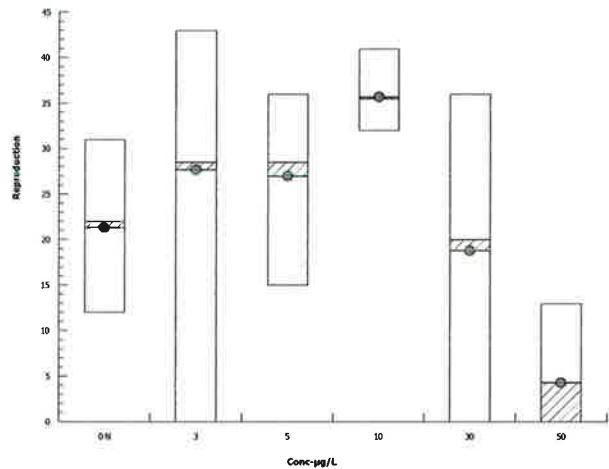
Endpoint: Reproduction
Analysis: Nonparametric-Control vs Treatments

CETIS Version: CETISv1.9.2
Official Results: Yes

Reproduction Detail

Conc- μ g/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	19	23	25	12	26	21	31	12	21	23
3		19	27	40	22	37	30	20	0	39	43
5		15	18	31	31	26	25	32	22	34	36
10		34	33	33	41	40	32	37	36	36	35
30		23	32	24	0	25	4	36	11	17	16
50		13	0	0	0	11	0	0	0	9	10

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CETIS Analytical Report

Report Date: 26 Jan-18 09:16 (p 1 of 4)
Test Code: CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID: 16-2721-6288	Endpoint: 7d Survival Rate	CETIS Version: CETISv1.9.2
Analyzed: 25 Jan-18 11:32	Analysis: Linear Interpolation (ICPIN)	Official Results: Yes
Batch ID: 12-0569-8752	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 09 Jan-18 10:00	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 16 Jan-18 12:00	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 7d 2h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 05-3581-9315	Code: CER010918	Client: ABC Labs
Sample Date: 09 Jan-18 10:00	Material: Copper chloride	Project: REF TOX
Receipt Date:	Source: Bioassay Report	
Sample Age: n/a	Station: Ref Tox	

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

Test Acceptability Criteria

TAC Limits					
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Point Estimates

Level	µg/L	95% LCL	95% UCL
EC5	11.25	1.5	30.51
EC10	15	10	31.54
EC15	18.75	13.12	32.56
EC20	22.5	15.71	33.59
EC25	26.25	17.5	34.62
EC40	32.86	22.94	37.69
EC50	35.71	26.47	39.74

7d Survival Rate Summary

Conc-µg/L	Code	Count	Calculated Variate(A/B)								
			Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	N	10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
3		10	0.9000	0.0000	1.0000	0.1000	0.3162	35.14%	10.0%	9	10
5		10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
10		10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
30		10	0.7000	0.0000	1.0000	0.1528	0.4830	69.01%	30.0%	7	10
50		10	0.0000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10

7d Survival Rate Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000
5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30		1.0000	1.0000	1.0000	0.0000	1.0000	0.0000	1.0000	0.0000	1.0000	1.0000
50		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7d Survival Rate Binomials

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
3		1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1
5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
10		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
30		1/1	1/1	1/1	0/1	1/1	0/1	1/1	0/1	1/1	1/1
50		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1



CETIS Analytical Report

Report Date: 26 Jan-18 09:16 (p 2 of 4)
Test Code: CER010918 | 11-7056-8330

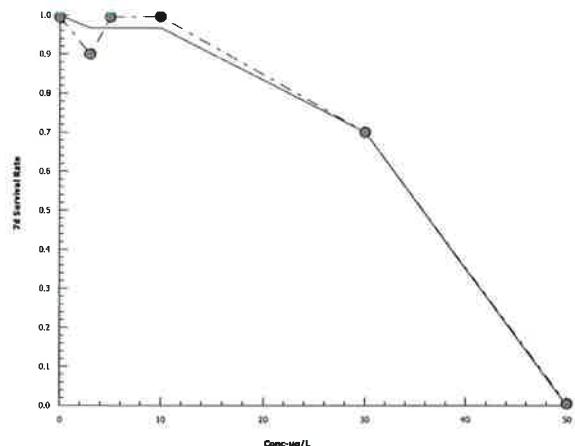
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 16-2721-6288 Endpoint: 7d Survival Rate
Analyzed: 25 Jan-18 11:32 Analysis: Linear Interpolation (ICPIN)

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 26 Jan-18 09:16 (p 3 of 4)
 Test Code: CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test				Aquatic Bioassay & Consulting Labs, Inc.	
Analysis ID: 06-3979-9151	Endpoint: Reproduction		CETIS Version: CETISv1.9.2		
Analyzed: 25 Jan-18 11:32	Analysis: Linear Interpolation (ICPIN)		Official Results: Yes		
Batch ID: 12-0569-8752	Test Type: Reproduction-Survival (7d)		Analyst:		
Start Date: 09 Jan-18 10:00	Protocol: EPA/821/R-02-013 (2002)		Diluent: Laboratory Water		
Ending Date: 16 Jan-18 12:00	Species: Ceriodaphnia dubia		Brine: Not Applicable		
Duration: 7d 2h	Source: Aquatic Biosystems, CO		Age:		
Sample ID: 05-3581-9315	Code: CER010918		Client: ABC Labs		
Sample Date: 09 Jan-18 10:00	Material: Copper chloride		Project: REF TOX		
Receipt Date:	Source: Bioassay Report				
Sample Age: n/a	Station: Ref Tox				

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

Test Acceptability Criteria

TAC Limits					
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	21.3	15	>>	Yes	Passes Criteria

Point Estimates

Level	µg/L	95% LCL	95% UCL
IC5	13.06	11.77	19.49
IC10	16.12	13.54	28.98
IC15	19.18	15.31	31.31
IC20	22.24	17.08	32.7
IC25	25.3	18.85	34.04
IC40	32.82	24.16	38.53
IC50	36.67	27.7	41.52

Reproduction Summary

Calculated Variate									
Conc-µg/L	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	21.3	12	31	1.868	5.908	27.74%	0.0%
3		10	27.7	0	43	4.137	13.08	47.23%	-30.05%
5		10	27	15	36	2.216	7.008	25.96%	-26.76%
10		10	35.7	32	41	0.9434	2.983	8.36%	-67.61%
30		10	18.8	0	36	3.648	11.54	61.36%	11.74%
50		10	4.3	0	13	1.783	5.638	131.10%	79.81%

Reproduction Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	19	23	25	12	26	21	31	12	21	23
3		19	27	40	22	37	30	20	0	39	43
5		15	18	31	31	26	25	32	22	34	36
10		34	33	33	41	40	32	37	36	36	35
30		23	32	24	0	25	4	36	11	17	16
50		13	0	0	0	11	0	0	0	9	10

CETIS Analytical Report

Report Date: 26 Jan-18 09:16 (p 4 of 4)
Test Code: CER010918 | 11-7056-8330

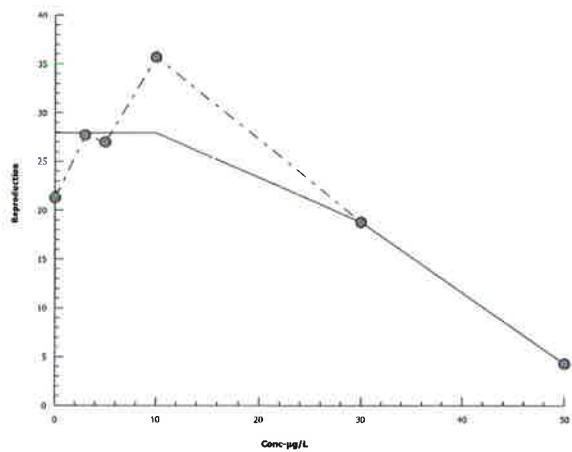
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 06-3979-9151 Endpoint: Reproduction
Analyzed: 25 Jan-18 11:32 Analysis: Linear Interpolation (ICPIN)

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



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CETIS Analytical Report

Report Date: 26 Jan-18 09:16 (p 1 of 2)
 Test Code: CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test				Aquatic Bioassay & Consulting Labs, Inc.	
Analysis ID:	03-3773-3833	Endpoint:	7d Survival Rate		CETIS Version: CETISv1.9.2
Analyzed:	25 Jan-18 11:32	Analysis:	STP 2xK Contingency Tables		Official Results: Yes
Batch ID:	12-0569-8752	Test Type:	Reproduction-Survival (7d)		Analyst:
Start Date:	09 Jan-18 10:00	Protocol:	EPA/821/R-02-013 (2002)		Diluent: Laboratory Water
Ending Date:	16 Jan-18 12:00	Species:	Ceriodaphnia dubia		Brine: Not Applicable
Duration:	7d 2h	Source:	Aquatic Biosystems, CO		Age:
Sample ID:	05-3581-9315	Code:	CER010918		Client: ABC Labs
Sample Date:	09 Jan-18 10:00	Material:	Copper chloride		Project: REF TOX
Receipt Date:		Source:	Bioassay Report		
Sample Age:	n/a	Station:	Ref Tox		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU
Untransformed	C > T	30	50	38.73	

Fisher Exact/Bonferroni-Holm Test

Control	vs	Group	Test Stat	P-Type	P-Value	Decision(α :5%)
Negative Control		3	0.5000	Exact	1.0000	Non-Significant Effect
		5	1.0000	Exact	1.0000	Non-Significant Effect
		10	1.0000	Exact	1.0000	Non-Significant Effect
		30	0.1053	Exact	0.4211	Non-Significant Effect
		50*	0.0000	Exact	2.7E-05	Significant Effect

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Data Summary

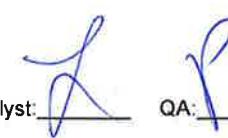
Conc- μ g/L	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
0	N	10	0	10	1	0	0.0%
3		9	1	10	0.9	0.1	10.0%
5		10	0	10	1	0	0.0%
10		10	0	10	1	0	0.0%
30		7	3	10	0.7	0.3	30.0%
50		0	10	10	0	1	100.0%

7d Survival Rate Detail

Conc- μ g/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000
5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30		1.0000	1.0000	1.0000	0.0000	1.0000	0.0000	1.0000	0.0000	1.0000	1.0000
50		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7d Survival Rate Binomials

Conc- μ g/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
3		1/1	1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1
5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
10		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
30		1/1	1/1	1/1	0/1	1/1	0/1	1/1	0/1	1/1	1/1
50		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1



CETIS Analytical Report

Report Date: 26 Jan-18 09:16 (p 2 of 2)
Test Code: CER010918 | 11-7056-8330

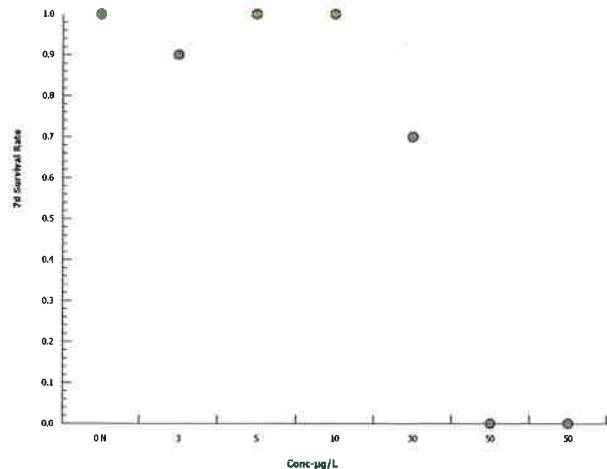
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 03-3773-3833 Endpoint: 7d Survival Rate
Analyzed: 25 Jan-18 11:32 Analysis: STP 2xK Contingency Tables

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Measurement Report

Report Date: 26 Jan-18 09:16 (p 1 of 2)
Test Code: CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID: 12-0569-8752	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 09 Jan-18 10:00	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 16 Jan-18 12:00	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 7d 2h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 05-3581-9315	Code: CER010918	Client: ABC Labs
Sample Date: 09 Jan-18 10:00	Material: Copper chloride	Project: REF TOX
Receipt Date:	Source: Bioassay Report	
Sample Age: n/a	Station: Ref Tox	

Alkalinity (CaCO3)-mg/L

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	65	61.54	68.46	60	68	1.464	4.14	6.37%	0
50		7	68	68	68	68	68	0	0	0.0%	0
Overall		15	66.4	64.57	68.23	60	68	0.8552	3.312	4.99%	0 (0%)

Conductivity- μ mhos

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	336.9	331.6	342.2	330	348	2.24	6.334	1.88%	0
3		8	336.2	331.5	341	327	344	2.016	5.701	1.7%	0
5		8	335.1	329.9	340.4	323	345	2.216	6.266	1.87%	0
10		8	334.8	333.2	336.3	333	338	0.6748	1.909	0.57%	0
30		8	333.9	332.4	335.4	331	337	0.6391	1.808	0.54%	0
50		7	332.7	330.5	334.9	329	336	0.8921	2.36	0.71%	0
Overall		47	335	333.6	336.3	323	348	0.6639	4.552	1.36%	0 (0%)

Dissolved Oxygen-mg/L

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.575	7.409	7.741	7.3	7.9	0.07008	0.1982	2.62%	0
3		8	7.887	7.614	8.161	7.5	8.3	0.1156	0.3271	4.15%	0
5		8	7.912	7.615	8.21	7.5	8.4	0.126	0.3563	4.5%	0
10		8	7.925	7.647	8.203	7.5	8.4	0.1176	0.3327	4.2%	0
30		8	7.912	7.595	8.23	7.4	8.4	0.1342	0.3796	4.8%	0
50		7	7.857	7.414	8.3	7.1	8.4	0.1811	0.4791	6.1%	0
Overall		47	7.845	7.74	7.949	7.1	8.4	0.05178	0.355	4.53%	0 (0%)

Hardness (CaCO3)-mg/L

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	97.12	94.96	99.29	94	99	0.9149	2.588	2.66%	0
50		7	100	100	100	100	100	0	0	0.0%	0
Overall		15	98.47	97.16	99.77	94	100	0.6084	2.356	2.39%	0 (0%)

pH-Units

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	8	7.81	8.19	7.6	8.4	0.08018	0.2268	2.84%	0
3		8	7.875	7.709	8.041	7.6	8.1	0.07008	0.1982	2.52%	0
5		8	7.975	7.888	8.062	7.8	8.1	0.0366	0.1035	1.3%	0
10		8	7.988	7.918	8.057	7.8	8.1	0.02951	0.08345	1.05%	0
30		8	7.975	7.916	8.034	7.8	8	0.025	0.07071	0.89%	0
50		7	8	8	8	8	8	0	0	0.0%	0
Overall		47	7.968	7.927	8.009	7.6	8.4	0.0202	0.1385	1.74%	0 (0%)

CETIS Measurement Report

Report Date:

26 Jan-18 09:16 (p 2 of 2)

Test Code:

CER010918 | 11-7056-8330

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.****Temperature-°C**

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24.01	23.98	24.04	24	24.1	0.01249	0.03531	0.15%	0
3		8	24.01	23.98	24.04	24	24.1	0.01249	0.03531	0.15%	0
5		8	24.01	23.98	24.04	24	24.1	0.01249	0.03531	0.15%	0
10		8	24.01	23.98	24.04	24	24.1	0.01249	0.03531	0.15%	0
30		8	24	24	24	24	24	0	0	0.0%	0
50		7	24	24	24	24	24	0	0	0.0%	0
Overall		47	24.01	24	24.02	24	24.1	0.004114	0.02821	0.12%	0 (0%)

Alkalinity (CaCO₃)-mg/L

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	60	60	60	68	68	68	68	68
50		68	68	68	68	68	68	68	68

Conductivity- μ hos

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	332	339	348	339	330	342	330	335
3		335	327	336	337	344	339	330	342
5		333	323	334	335	339	345	334	338
10		333	335	333	333	335	337	334	338
30		333	331	333	333	334	335	335	337
50		332	331	333	333	329	335	336	

Dissolved Oxygen-mg/L

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	7.5	7.5	7.6	7.8	7.9	7.6	7.4	7.3
3		8.3	8.3	7.7	7.7	8.2	7.8	7.6	7.5
5		8.3	8.4	7.7	7.6	8.2	7.5	8	7.6
10		8.3	8.4	7.7	7.5	8.2	7.7	7.9	7.7
30		8.4	8.4	7.7	7.4	8.2	7.6	7.9	7.7
50		8.4	8.3	7.7	7.4	8.1	8	7.1	

Hardness (CaCO₃)-mg/L

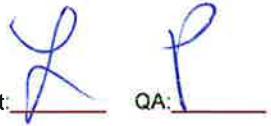
Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	94	94	94	99	99	99	99	99
50		100	100	100	100	100	100	100	100

pH-Units

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	7.9	8.1	8.1	7.9	8	8.4	8	7.6
3		7.8	8.1	8.1	7.9	7.9	7.6	7.6	8
5		7.9	8.1	8.1	8	7.9	8	7.8	8
10		8	8	8.1	8	8	8	7.8	8
30		8	8	8	8	8	8	7.8	8
50		8	8	8	8	8	8	8	

Temperature-°C

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	24	24.1	24	24	24	24	24	24
3		24	24.1	24	24	24	24	24	24
5		24	24	24	24	24	24	24.1	24
10		24	24	24	24	24	24	24.1	24
30		24	24	24	24	24	24	24	24
50		24	24	24	24	24	24	24	





Weck Laboratories, Inc.

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CHAIN OF CUSTODY RECORD

8C22059

STANDARD

Page 1 Of 1

CLIENT NAME: Pacific RIdgeline				PROJECT: Nursery Growers Association				ANALYSES REQUESTED								SPECIAL HANDLING	
ADDRESS: 1891 Goodyear Ave., Suite 621 Ventura, CA 93003				PHONE: 855-682-1802 EMAIL: brynn@pacrl.com				<input checked="" type="checkbox"/> TDS-SM2540C / TSS-SM2540D <input checked="" type="checkbox"/> Cl, SO ₄ , NO ₃ -NO ₂ -N - EPA 300.0 <input checked="" type="checkbox"/> Ammonia-N EPA350.1 - <input checked="" type="checkbox"/> Copper EPA200.8 - <input checked="" type="checkbox"/> Hardness 200.7 - <input checked="" type="checkbox"/> OPP low level EPA 525.2 - <input checked="" type="checkbox"/> Organo Pest/PCBs low M EPA608 <input checked="" type="checkbox"/> Pyrethroid Pest by GC/MS NC1-SIM <input checked="" type="checkbox"/> Ortho-P and P dissolved EPA365.1 <input checked="" type="checkbox"/> Ortho-P and P total as P EPA365.3								<input checked="" type="checkbox"/> Same Day Rush 150% <input checked="" type="checkbox"/> 24 Hour Rush 100% <input checked="" type="checkbox"/> 48-72 Hour Rush 75% <input checked="" type="checkbox"/> 4 - 5 Day Rush 30% <input checked="" type="checkbox"/> Rush Extractions 50% <input checked="" type="checkbox"/> 10 - 15 Business Days <input checked="" type="checkbox"/> QA/QC Data Package	
PROJECT MANAGER Brynn Home				SAMPLER Scott Jordan												Charges will apply for weekends/holidays	
ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL. TYPE	SAMPLE IDENTIFICATION/SITE LOCATION		# OF CONT.									Method of Shipment:		
	3/22/18	8:00 am	RW	LAILG-NGA #19-9		12									COMMENTS		
	3/22/18	11:00 am	RW	LAILG-NGA #4-9		12											
	3/22/18	11:45	RW	LAILG-NGA #64-5		12											
	3/22/18	13:00	RW	LAILG-NGA #168-9		12											
RELINQUISHED BY 				DATE / TIME 3/22/18 @ 14:15		RECEIVED BY 		SAMPLE CONDITION: Actual Temperature: 10.4								SAMPLE TYPE CODE: AQ=Aqueous NA=Non Aqueous SL = Sludge	
RELINQUISHED BY				DATE / TIME		RECEIVED BY		Received On Ice Preserved Evidence Seals Present Container Attacked Preserved at Lab								DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix	
RELINQUISHED BY				DATE / TIME		RECEIVED BY											
PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS Client agrees to Terms & Conditions at: www.wecklabs.com						SPECIAL REQUIREMENTS / BILLING INFORMATION											



WECK LABORATORIES, INC.

Work Orders: 8C22059

Report Date: 4/20/2018

3/22/2018

Project: Nursery Growers Association

Turnaround Time: Normal

Phones: (805) 933-1770

Fax:

Attn: Scott Jordan

P.O. #:

Client: Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Billing Code:

DoD-ELAP #L2457 • EPA-UCMR #CA00211 • Guam-EPA #17-008R • ISO 17025 #L2457.01 • LACSD #10143 • NJ-DEP #CA015

This is a complete final report. The information in this report applies to the samples analyzed in accordance with the chain-of-custody document. Weck Laboratories certifies that the test results meet all requirements of TNI unless noted by qualifiers or written in the Case Narrative. This analytical report must be reproduced in its entirety.

Dear Scott Jordan,

Enclosed are the results of analyses for samples received 3/22/18 with the Chain-of-Custody document. The samples were received in good condition, at 16.4 °C and on ice. All analyses met the method criteria except as noted in the case narrative or in the report with data qualifiers.

Reviewed by:

Chris Samatmanikit
Project Manager





WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Summary

Sample Name	Sampled By	Lab ID	Matrix	Sampled	Qualifiers
LAILG-NGA-#19-9	Scott Jordan	8C22059-01	Water	03/22/18 08:10	
LAILG-NGA-#4-9	Scott Jordan	8C22059-02	Water	03/22/18 11:00	
LAILG-NGA-#64-5	Scott Jordan	8C22059-03	Water	03/22/18 11:45	
LAILG-NGA-#168-9	Scott Jordan	8C22059-04	Water	03/22/18 13:00	

Not Certified Analyses Summary

Analyte	CAS #	Not Accredited By
EPA 8270M in Water		
Dichloran	99-30-9	NELAP
Tefluthrin	79538-32-2	NELAP
Pendimethalin	40487-42-1	NELAP
Allethrin	584-79-2	NELAP
Prallethrin	23031-36-9	NELAP
Bifenthrin	82657-04-3	NELAP
Sumithrin (Phenothrin)	26002-80-2	NELAP
L-Cyhalothrin	91465-08-6	NELAP
Permethrin	52645-53-1	NELAP
Cyfluthrin	68359-37-5	NELAP
Cypermethrin	52315-07-8	NELAP
Fenvalerate/Esfenvalerate	51630-58-1	NELAP
Deltamethrin/Tralomethrin	52820-00-5	NELAP
Fenpropathrin (Danitol)	39515-41-8	NELAP
Triphenyl phosphate	115-86-6	NELAP
Perylene-d12	1520-96-3	NELAP



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

Sample: LAILG-NGA-#19-9
8C22059-01 (Water) Sampled: 03/22/18 8:10 by Scott Jordan

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0	Batch ID: W8C1374	Instr: LC12	Prepared: 03/23/18 08:51		Analyst: jan	
Chloride, Total	140	2.0	mg/l	4	03/23/18 20:37	
NO2+NO3 as N	93	0.45	mg/l	4	03/23/18 20:37	
Sulfate as SO4	150	2.0	mg/l	4	03/23/18 20:37	

Chlorinated Pesticides and/or PCBs by GC/ECD

Method: EPA 608	Batch ID: W8C1733	Instr: GC07	Prepared: 03/28/18 15:14		Analyst: rmr	
2,4'-DDD		ND	10	ng/l	2	04/02/18 20:30 M-04
2,4'-DDE		ND	10	ng/l	2	04/02/18 20:30 M-04
2,4'-DDT		ND	10	ng/l	2	04/02/18 20:30 M-04
4,4'-DDD		ND	10	ng/l	2	04/02/18 20:30 M-04
4,4'-DDE		ND	10	ng/l	2	04/02/18 20:30 M-04
4,4'-DDT		ND	10	ng/l	2	04/02/18 20:30 M-04
Aldrin		ND	10	ng/l	2	04/02/18 20:30 M-04
alpha-BHC		ND	10	ng/l	2	04/02/18 20:30 M-04
alpha-Chlordane		ND	10	ng/l	2	04/02/18 20:30 M-04
Aroclor 1016		ND	500	ng/l	5	04/06/18 07:38 M-04
Aroclor 1221		ND	500	ng/l	5	04/06/18 07:38 M-04
Aroclor 1232		ND	500	ng/l	5	04/06/18 07:38 M-04
Aroclor 1242		ND	500	ng/l	5	04/06/18 07:38 M-04
Aroclor 1248		ND	500	ng/l	5	04/06/18 07:38 M-04
Aroclor 1254		ND	500	ng/l	5	04/06/18 07:38 M-04
Aroclor 1260		ND	500	ng/l	5	04/06/18 07:38 M-04
beta-BHC		ND	10	ng/l	2	04/02/18 20:30 M-04
Chlordane (tech)		ND	200	ng/l	2	04/02/18 20:30 M-04
cis-Nonachlor		ND	10	ng/l	2	04/02/18 20:30 M-04
delta-BHC		ND	10	ng/l	2	04/02/18 20:30 M-04
Dieldrin		ND	10	ng/l	2	04/02/18 20:30 M-04
Endosulfan I		ND	10	ng/l	2	04/02/18 20:30 M-04
Endosulfan II		ND	10	ng/l	2	04/02/18 20:30 M-04
Endosulfan sulfate		ND	10	ng/l	2	04/02/18 20:30 M-04
Endrin		ND	10	ng/l	2	04/02/18 20:30 M-04
Endrin aldehyde		ND	10	ng/l	2	04/02/18 20:30 M-04
gamma-BHC (Lindane)		ND	10	ng/l	2	04/02/18 20:30 M-04
gamma-Chlordane		ND	10	ng/l	2	04/02/18 20:30 M-04
Heptachlor		ND	10	ng/l	2	04/02/18 20:30 M-04
Heptachlor epoxide		ND	10	ng/l	2	04/02/18 20:30 M-04
Methoxychlor		ND	10	ng/l	2	04/02/18 20:30 M-04

8C22059

Page 3 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-#19-9	Sampled: 03/22/18 8:10 by Scott Jordan
8C22059-01 (Water)	(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Method: EPA 608	Batch ID: W8C1733	Instr: GC07	Prepared: 03/28/18 15:14	Analyst: rmr		
Mirex		ND	10 ng/l	2	04/02/18 20:30	M-04
Toxaphene		ND	2500 ng/l	5	04/06/18 07:38	M-04
trans-Nonachlor		ND	10 ng/l	2	04/02/18 20:30	M-04
<i>Surrogate(s)</i>						
Decachlorobiphenyl		30%	Conc: 29.9	34-125	04/02/18 20:30	M-04, S-GC
Tetrachloro-meta-xylene		44%	Conc: 44.1	35-111	04/02/18 20:30	M-04

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 350.1	Batch ID: W8C1697	Instr: AA06	Prepared: 03/28/18 10:04	Analyst: mnq		
Ammonia as N		0.53	0.10 mg/l	1	03/29/18 18:17	
Method: EPA 365.1	Batch ID: W8C1371	Instr: AA01	Prepared: 03/23/18 08:32	Analyst: AJK		
o-Phosphate as P		0.48	0.010 mg/l	5	03/23/18 10:09	
o-Phosphate as P, dissolved		480	10 ug/l	5	03/23/18 10:09	
Method: EPA 365.1	Batch ID: W8C1539	Instr: AA01	Prepared: 03/26/18 13:21	Analyst: AJK		
Phosphorus as P, Total		3.3	0.20 mg/l	1	03/30/18 13:26	M-06
Method: EPA 365.1	Batch ID: W8C1540	Instr: AA01	Prepared: 03/26/18 13:20	Analyst: AJK		
Phosphorus, Dissolved		0.54	0.050 mg/l	1	04/03/18 12:21	M-06
Method: SM 2540C	Batch ID: W8C1574	Instr: Inst	Prepared: 03/26/18 18:08	Analyst: ymt		
Total Dissolved Solids		1400	10 mg/l	1	03/28/18 17:53	
Method: SM 2540D	Batch ID: W8C1629	Instr: Inst	Prepared: 03/27/18 12:57	Analyst: mic		
Total Suspended Solids		760	5 mg/l	1	03/28/18 11:43	

Metals by EPA 200 Series Methods

Method: EPA 200.7	Batch ID: [CALC]	Instr: [CALC]	Prepared: 03/30/18 18:15	Analyst: JCK		
Calcium Hardness as CaCO ₃		434	0.250 mg/l	1	04/02/18 16:39	
Method: EPA 200.7	Batch ID: W8C1899	Instr: ICP03	Prepared: 03/30/18 18:15	Analyst: JCK		
Calcium, Total		174	0.100 mg/l	1	04/02/18 16:39	
Method: EPA 200.8	Batch ID: W8C1898	Instr: ICPMS02	Prepared: 03/30/18 18:08	Analyst: MTT		
Copper, Total		60	0.50 ug/l	1	04/03/18 20:04	

Pyrethroid Pesticides by EPA 8270M

Method: EPA 8270M	Batch ID: W8C1588	Instr: GCMS15	Prepared: 03/27/18 08:26	Analyst: EFC		
Allethrin		ND	20 ng/l	10	04/12/18 02:43	M-04
Bifenthrin		ND	20 ng/l	10	04/12/18 02:43	M-04
Cyfluthrin		ND	20 ng/l	10	04/12/18 02:43	M-04
Cypermethrin		ND	20 ng/l	10	04/12/18 02:43	M-04
Deltamethrin/Tralomethrin		ND	20 ng/l	10	04/12/18 02:43	M-04
Dichloran		ND	20 ng/l	10	04/12/18 02:43	M-04
Fenpropathrin (Danitol)		51	20 ng/l	10	04/12/18 02:43	M-04



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-#19-9
8C22059-01 (Water) Sampled: 03/22/18 8:10 by Scott Jordan
(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Pyrethroid Pesticides by EPA 8270M (Continued)						
Method: EPA 8270M	Batch ID: W8C1588	Instr: GCMS15	Prepared: 03/27/18 08:26		Analyst: EFC	
Fenvalerate/Esfenvalerate	ND	20	ng/l	10	04/12/18 02:43	M-04
L-Cyhalothrin	ND	20	ng/l	10	04/12/18 02:43	M-04
Pendimethalin	27	20	ng/l	10	04/12/18 02:43	M-04
Permethrin	ND	50	ng/l	10	04/12/18 02:43	M-04
Prallethrin	ND	20	ng/l	10	04/12/18 02:43	M-04
Sumithrin (Phenothrin)	ND	100	ng/l	10	04/12/18 02:43	M-04
Tefluthrin	ND	20	ng/l	10	04/12/18 02:43	M-04
<i>Surrogate(s)</i>						
Perylene-d12	67%	Conc: 168	2-205		04/12/18 02:43	M-04
Triphenyl phosphate	94%	Conc: 235	6-222		04/12/18 02:43	M-04

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 525.2M	Batch ID: W8C1385	Instr: GCMS13	Prepared: 03/23/18 09:40	Analyst: EFC	
Azinphos methyl (Guthion)	ND	50	ng/l	1	03/30/18 20:44
Bolstar	ND	50	ng/l	1	03/30/18 20:44
Chlorpyrifos	ND	50	ng/l	1	03/30/18 20:44
Coumaphos	ND	50	ng/l	1	03/30/18 20:44
Demeton-o	ND	50	ng/l	1	03/30/18 20:44
Demeton-s	ND	50	ng/l	1	03/30/18 20:44
Diazinon	ND	50	ng/l	1	03/30/18 20:44
Dichlorvos	ND	50	ng/l	1	03/30/18 20:44
Dimethoate	ND	50	ng/l	1	03/30/18 20:44
Disulfoton	ND	50	ng/l	1	03/30/18 20:44
Ethoprop	ND	50	ng/l	1	03/30/18 20:44
Ethyl parathion	ND	50	ng/l	1	03/30/18 20:44
Fensulfothion	ND	50	ng/l	1	03/30/18 20:44
Fenthion	ND	50	ng/l	1	03/30/18 20:44
Malathion	ND	50	ng/l	1	03/30/18 20:44
Merphos	ND	50	ng/l	1	03/30/18 20:44
Methyl parathion	ND	50	ng/l	1	03/30/18 20:44
Mevinphos	ND	50	ng/l	1	03/30/18 20:44
Naled	ND	50	ng/l	1	03/30/18 20:44
Phorate	ND	50	ng/l	1	03/30/18 20:44
Ronnel	ND	50	ng/l	1	03/30/18 20:44
Stirophos	ND	50	ng/l	1	03/30/18 20:44
Tokuthion (Prothifos)	ND	50	ng/l	1	03/30/18 20:44
Trichloronate	ND	50	ng/l	1	03/30/18 20:44
<i>Surrogate(s)</i>					

8C22059

Page 5 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#19-9 Sampled: 03/22/18 8:10 by Scott Jordan
8C22059-01 (Water) (Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)						
Method: EPA 525.2M	Batch ID: W8C1385	Instr: GCMS13	Prepared: 03/23/18 09:40		Analyst: EFC	
1,3-Dimethyl-2-nitrobenzene	114% Conc: 2850	76-128			03/30/18 20:44	M-02
Triphenyl phosphate	170% Conc: 4260	40-163			03/30/18 20:44	M-02, S-11



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#4-9
8C22059-02 (Water) Sampled: 03/22/18 11:00 by Scott Jordan

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0	Batch ID: W8C1374	Instr: LC12	Prepared: 03/23/18 08:51		Analyst: jan	
Chloride, Total	2.4	0.50	mg/l	1	03/23/18 13:05	
NO ₂ +NO ₃ as N	0.58	0.11	mg/l	1	03/23/18 13:05	
Sulfate as SO ₄	2.5	0.50	mg/l	1	03/23/18 13:05	

Chlorinated Pesticides and/or PCBs by GC/ECD

Method: EPA 608	Batch ID: W8C1733	Instr: GC07	Prepared: 03/28/18 15:14	Analyst: rmr	
2,4'-DDD		ND	10	ng/l	2 04/02/18 21:00 M-04
2,4'-DDE		ND	10	ng/l	2 04/02/18 21:00 M-04
2,4'-DDT		ND	10	ng/l	2 04/02/18 21:00 M-04
4,4'-DDD		ND	10	ng/l	2 04/02/18 21:00 M-04
4,4'-DDE		ND	10	ng/l	2 04/02/18 21:00 M-04
4,4'-DDT		ND	10	ng/l	2 04/02/18 21:00 M-04
Aldrin		ND	10	ng/l	2 04/02/18 21:00 M-04
alpha-BHC		ND	10	ng/l	2 04/02/18 21:00 M-04
alpha-Chlordane		ND	10	ng/l	2 04/02/18 21:00 M-04
Aroclor 1016		ND	500	ng/l	5 04/06/18 08:09 M-04
Aroclor 1221		ND	500	ng/l	5 04/06/18 08:09 M-04
Aroclor 1232		ND	500	ng/l	5 04/06/18 08:09 M-04
Aroclor 1242		ND	500	ng/l	5 04/06/18 08:09 M-04
Aroclor 1248		ND	500	ng/l	5 04/06/18 08:09 M-04
Aroclor 1254		ND	500	ng/l	5 04/06/18 08:09 M-04
Aroclor 1260		ND	500	ng/l	5 04/06/18 08:09 M-04
beta-BHC		ND	10	ng/l	2 04/02/18 21:00 M-04
Chlordane (tech)		ND	200	ng/l	2 04/02/18 21:00 M-04
cis-Nonachlor		ND	10	ng/l	2 04/02/18 21:00 M-04
delta-BHC		ND	10	ng/l	2 04/02/18 21:00 M-04
Dieldrin		ND	10	ng/l	2 04/02/18 21:00 M-04
Endosulfan I		ND	10	ng/l	2 04/02/18 21:00 M-04
Endosulfan II		ND	10	ng/l	2 04/02/18 21:00 M-04
Endosulfan sulfate		ND	10	ng/l	2 04/02/18 21:00 M-04
Endrin		ND	10	ng/l	2 04/02/18 21:00 M-04
Endrin aldehyde		ND	10	ng/l	2 04/02/18 21:00 M-04
gamma-BHC (Lindane)		ND	10	ng/l	2 04/02/18 21:00 M-04
gamma-Chlordane		ND	10	ng/l	2 04/02/18 21:00 M-04
Heptachlor		ND	10	ng/l	2 04/02/18 21:00 M-04
Heptachlor epoxide		ND	10	ng/l	2 04/02/18 21:00 M-04
Methoxychlor		ND	10	ng/l	2 04/02/18 21:00 M-04

8C22059

Page 7 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-#4-9
8C22059-02 (Water) Sampled: 03/22/18 11:00 by Scott Jordan
(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Method: EPA 608	Batch ID: W8C1733	Instr: GC07	Prepared: 03/28/18 15:14	Analyst: rmr	
Mirex		ND	10	ng/l	2
Toxaphene		ND	2500	ng/l	5
trans-Nonachlor		ND	10	ng/l	2
Surrogate(s)					
Decachlorobiphenyl		81%	Conc: 80.8	34-125	04/02/18 21:00
Tetrachloro-meta-xylene		49%	Conc: 48.8	35-111	04/02/18 21:00

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 350.1	Batch ID: W8C1697	Instr: AA06	Prepared: 03/28/18 10:04	Analyst: mnq	
Ammonia as N		0.32	0.10	mg/l	1
0.32					03/29/18 18:17
Method: EPA 365.1	Batch ID: W8C1371	Instr: AA01	Prepared: 03/23/18 08:32	Analyst: AJK	
o-Phosphate as P		0.25	0.0040	mg/l	2
o-Phosphate as P, dissolved		250	4.0	ug/l	2
250					03/23/18 10:15
Method: EPA 365.1	Batch ID: W8C1539	Instr: AA01	Prepared: 03/26/18 13:21	Analyst: AJK	
Phosphorus as P, Total		0.44	0.050	mg/l	1
0.44					03/30/18 13:28
Method: EPA 365.1	Batch ID: W8C1540	Instr: AA01	Prepared: 03/26/18 13:20	Analyst: AJK	
Phosphorus, Dissolved		0.22	0.020	mg/l	1
0.22					04/03/18 12:23
Method: SM 2540C	Batch ID: W8C1574	Instr: Inst	Prepared: 03/26/18 18:08	Analyst: ymt	
Total Dissolved Solids		42	10	mg/l	1
42					03/28/18 17:53
Method: SM 2540D	Batch ID: W8C1630	Instr: Inst	Prepared: 03/27/18 13:02	Analyst: ajk	
Total Suspended Solids		82	5	mg/l	1
82					03/28/18 16:15

Metals by EPA 200 Series Methods

Method: EPA 200.7	Batch ID: [CALC]	Instr: [CALC]	Prepared: 03/30/18 18:15	Analyst: JCK	
Calcium Hardness as CaCO3		13.5	0.250	mg/l	1
13.5					04/02/18 16:42
Method: EPA 200.7	Batch ID: W8C1899	Instr: ICP03	Prepared: 03/30/18 18:15	Analyst: JCK	
Calcium, Total		5.42	0.100	mg/l	1
5.42					04/02/18 16:42
Method: EPA 200.8	Batch ID: W8C1898	Instr: ICPMS02	Prepared: 03/30/18 18:08	Analyst: MTT	
Copper, Total		22	0.50	ug/l	1
22					04/03/18 20:12

Pyrethroid Pesticides by EPA 8270M

Method: EPA 8270M	Batch ID: W8C1588	Instr: GCMS15	Prepared: 03/27/18 08:26	Analyst: EFC	
Allethrin		ND	100	ng/l	50
Bifenthrin		ND	100	ng/l	50
Cyfluthrin		ND	100	ng/l	50
Cypermethrin		ND	100	ng/l	50
Deltamethrin/Tralomethrin		ND	100	ng/l	50
Dichloran		ND	100	ng/l	50
Fenpropathrin (Danitol)		ND	100	ng/l	50
Fenpropathrin (Danitol)					04/12/18 03:18
					M-04

8C22059

Page 8 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#4-9
8C22059-02 (Water) Sampled: 03/22/18 11:00 by Scott Jordan
(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Pyrethroid Pesticides by EPA 8270M (Continued)						
Method: EPA 8270M	Batch ID: W8C1588	Instr: GCMS15	Prepared: 03/27/18 08:26		Analyst: EFC	
Fenvalerate/Esfenvalerate	ND	100	ng/l	50	04/12/18 03:18	M-04
L-Cyhalothrin	ND	100	ng/l	50	04/12/18 03:18	M-04
Pendimethalin	ND	100	ng/l	50	04/12/18 03:18	M-04
Permethrin	ND	250	ng/l	50	04/12/18 03:18	M-04
Prallethrin	ND	100	ng/l	50	04/12/18 03:18	M-04
Sumithrin (Phenothrin)	ND	500	ng/l	50	04/12/18 03:18	M-04
Tefluthrin	ND	100	ng/l	50	04/12/18 03:18	M-04
<i>Surrogate(s)</i>						
Perylene-d12	85%	Conc: 211	2-205		04/12/18 03:18	M-04
Triphenyl phosphate	119%	Conc: 299	6-222		04/12/18 03:18	M-04

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 525.2M	Batch ID: W8C1385	Instr: GCMS13	Prepared: 03/23/18 09:40	Analyst: EFC
Azinphos methyl (Guthion)	ND	50	ng/l	1 03/30/18 21:09 M-02
Bolstar	ND	50	ng/l	1 03/30/18 21:09 M-02
Chlorpyrifos	360	50	ng/l	1 03/30/18 21:09 M-02
Coumaphos	ND	50	ng/l	1 03/30/18 21:09 M-02
Demeton-o	ND	50	ng/l	1 03/30/18 21:09 M-02
Demeton-s	ND	50	ng/l	1 03/30/18 21:09 M-02
Diazinon	62	50	ng/l	1 03/30/18 21:09 M-02
Dichlorvos	ND	50	ng/l	1 03/30/18 21:09 M-02
Dimethoate	ND	50	ng/l	1 03/30/18 21:09 M-02
Disulfoton	ND	50	ng/l	1 03/30/18 21:09 M-02
Ethoprop	ND	50	ng/l	1 03/30/18 21:09 M-02
Ethyl parathion	ND	50	ng/l	1 03/30/18 21:09 M-02
Fensulfothion	ND	50	ng/l	1 03/30/18 21:09 M-02
Fenthion	ND	50	ng/l	1 03/30/18 21:09 M-02
Malathion	160	50	ng/l	1 03/30/18 21:09 M-02
Merphos	ND	50	ng/l	1 03/30/18 21:09 M-02
Methyl parathion	ND	50	ng/l	1 03/30/18 21:09 M-02
Mevinphos	ND	50	ng/l	1 03/30/18 21:09 M-02
Naled	ND	50	ng/l	1 03/30/18 21:09 M-02
Phorate	ND	50	ng/l	1 03/30/18 21:09 M-02
Ronnel	ND	50	ng/l	1 03/30/18 21:09 M-02
Stirophos	ND	50	ng/l	1 03/30/18 21:09 M-02
Tokuthion (Prothifos)	ND	50	ng/l	1 03/30/18 21:09 M-02
Trichloronate	ND	50	ng/l	1 03/30/18 21:09 M-02
<i>Surrogate(s)</i>				

8C22059

Page 9 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#4-9
8C22059-02 (Water) Sampled: 03/22/18 11:00 by Scott Jordan
(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)						
Method: EPA 525.2M	Batch ID: W8C1385	Instr: GCMS13	Prepared: 03/23/18 09:40		Analyst: EFC	
1,3-Dimethyl-2-nitrobenzene	130% Conc: 3260	76-128			03/30/18 21:09	M-02, S-11
Triphenyl phosphate	130% Conc: 3260	40-163			03/30/18 21:09	M-02



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#64-5
8C22059-03 (Water) Sampled: 03/22/18 11:45 by Scott Jordan

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0	Batch ID: W8C1374	Instr: LC12	Prepared: 03/23/18 08:51		Analyst: jan	
Chloride, Total	3.3	0.50	mg/l	1	03/23/18 13:23	
NO2+NO3 as N	1.4	0.11	mg/l	1	03/23/18 13:23	
Sulfate as SO4	5.8	0.50	mg/l	1	03/23/18 13:23	

Chlorinated Pesticides and/or PCBs by GC/ECD

Method: EPA 608	Batch ID: W8C1733	Instr: GC07	Prepared: 03/28/18 15:14		Analyst: rmr	
2,4'-DDD		ND	10	ng/l	2	04/03/18 03:37 M-04
2,4'-DDE		ND	10	ng/l	2	04/03/18 03:37 M-04
2,4'-DDT		ND	10	ng/l	2	04/03/18 03:37 M-04
4,4'-DDD		ND	10	ng/l	2	04/03/18 03:37 M-04
4,4'-DDE		ND	10	ng/l	2	04/03/18 03:37 M-04
4,4'-DDT		ND	10	ng/l	2	04/03/18 03:37 M-04
Aldrin		ND	10	ng/l	2	04/03/18 03:37 M-04
alpha-BHC		ND	10	ng/l	2	04/03/18 03:37 M-04
alpha-Chlordane		ND	10	ng/l	2	04/03/18 03:37 M-04
Aroclor 1016		ND	500	ng/l	5	04/06/18 08:40 M-04
Aroclor 1221		ND	500	ng/l	5	04/06/18 08:40 M-04
Aroclor 1232		ND	500	ng/l	5	04/06/18 08:40 M-04
Aroclor 1242		ND	500	ng/l	5	04/06/18 08:40 M-04
Aroclor 1248		ND	500	ng/l	5	04/06/18 08:40 M-04
Aroclor 1254		ND	500	ng/l	5	04/06/18 08:40 M-04
Aroclor 1260		ND	500	ng/l	5	04/06/18 08:40 M-04
beta-BHC		ND	10	ng/l	2	04/03/18 03:37 M-04
Chlordane (tech)		ND	200	ng/l	2	04/03/18 03:37 M-04
cis-Nonachlor		ND	10	ng/l	2	04/03/18 03:37 M-04
delta-BHC		ND	10	ng/l	2	04/03/18 03:37 M-04
Dieldrin		ND	10	ng/l	2	04/03/18 03:37 M-04
Endosulfan I		ND	10	ng/l	2	04/03/18 03:37 M-04
Endosulfan II		ND	10	ng/l	2	04/03/18 03:37 M-04
Endosulfan sulfate		ND	10	ng/l	2	04/03/18 03:37 M-04
Endrin		ND	10	ng/l	2	04/03/18 03:37 M-04
Endrin aldehyde		ND	10	ng/l	2	04/03/18 03:37 M-04
gamma-BHC (Lindane)		ND	10	ng/l	2	04/03/18 03:37 M-04
gamma-Chlordane		ND	10	ng/l	2	04/03/18 03:37 M-04
Heptachlor		ND	10	ng/l	2	04/03/18 03:37 M-04
Heptachlor epoxide		ND	10	ng/l	2	04/03/18 03:37 M-04
Methoxychlor		ND	10	ng/l	2	04/03/18 03:37 M-04

8C22059

Page 11 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-#64-5	Sampled: 03/22/18 11:45 by Scott Jordan
8C22059-03 (Water)	(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Method: EPA 608	Batch ID: W8C1733	Instr: GC07	Prepared: 03/28/18 15:14	Analyst:	rnr
Mirex		ND	10	ng/l	2
Toxaphene		ND	2500	ng/l	5
trans-Nonachlor		ND	10	ng/l	2
Surrogate(s)					
Decachlorobiphenyl		37%	Conc: 36.8	34-125	04/03/18 03:37
Tetrachloro-meta-xylene		66%	Conc: 66.4	35-111	04/03/18 03:37

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 350.1	Batch ID: W8C1718	Instr: AA06	Prepared: 03/28/18 12:50	Analyst:	mnq
Ammonia as N		0.37	0.10	mg/l	1
0.37					03/29/18 18:17
Method: EPA 365.1	Batch ID: W8C1371	Instr: AA01	Prepared: 03/23/18 08:32	Analyst:	AJK
o-Phosphate as P		0.26	0.0040	mg/l	2
o-Phosphate as P, dissolved		260	4.0	ug/l	2
0.26					03/23/18 10:18
Method: EPA 365.1	Batch ID: W8C1539	Instr: AA01	Prepared: 03/26/18 13:21	Analyst:	AJK
Phosphorus as P, Total		0.64	0.050	mg/l	1
0.64					03/30/18 12:47
Method: EPA 365.1	Batch ID: W8C1540	Instr: AA01	Prepared: 03/26/18 13:20	Analyst:	AJK
Phosphorus, Dissolved		0.26	0.020	mg/l	1
0.26					04/03/18 12:24
Method: SM 2540C	Batch ID: W8C1574	Instr: Inst	Prepared: 03/26/18 18:08	Analyst:	ymt
Total Dissolved Solids		92	10	mg/l	1
92					03/28/18 17:53
Method: SM 2540D	Batch ID: W8C1744	Instr: Inst	Prepared: 03/28/18 16:52	Analyst:	mic
Total Suspended Solids		110	5	mg/l	1
110					03/29/18 13:30

Metals by EPA 200 Series Methods

Method: EPA 200.7	Batch ID: [CALC]	Instr: [CALC]	Prepared: 03/30/18 18:15	Analyst:	JCK
Calcium Hardness as CaCO3		29.1	0.250	mg/l	1
0.250					04/02/18 16:44
Method: EPA 200.7	Batch ID: W8C1899	Instr: ICP03	Prepared: 03/30/18 18:15	Analyst:	JCK
Calcium, Total		11.7	0.100	mg/l	1
0.100					04/02/18 16:44
Method: EPA 200.8	Batch ID: W8C1898	Instr: ICPMS02	Prepared: 03/30/18 18:08	Analyst:	MTT
Copper, Total		13	0.50	ug/l	1
0.50					04/03/18 20:19

Pyrethroid Pesticides by EPA 8270M

Method: EPA 8270M	Batch ID: W8C1588	Instr: GCMS15	Prepared: 03/27/18 08:26	Analyst:	EFC
Allethrin		ND	20	ng/l	10
Bifenthrin		ND	20	ng/l	10
Cyfluthrin		ND	20	ng/l	10
Cypermethrin		ND	20	ng/l	10
Deltamethrin/Tralomethrin		ND	20	ng/l	10
Dichloran		ND	20	ng/l	10
Fenpropathrin (Danitol)		ND	20	ng/l	10
					04/12/18 03:52
					M-04
					04/12/18 03:52
					M-04
					04/12/18 03:52
					M-04
					04/12/18 03:52
					M-04
					04/12/18 03:52
					M-04

8C22059

Page 12 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#64-5
8C22059-03 (Water) Sampled: 03/22/18 11:45 by Scott Jordan
(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Pyrethroid Pesticides by EPA 8270M (Continued)						
Method: EPA 8270M	Batch ID: W8C1588	Instr: GCMS15	Prepared: 03/27/18 08:26		Analyst: EFC	
Fenvalerate/Esfenvalerate	ND	20	ng/l	10	04/12/18 03:52	M-04
L-Cyhalothrin	ND	20	ng/l	10	04/12/18 03:52	M-04
Pendimethalin	ND	20	ng/l	10	04/12/18 03:52	M-04
Permethrin	ND	50	ng/l	10	04/12/18 03:52	M-04
Prallethrin	ND	20	ng/l	10	04/12/18 03:52	M-04
Sumithrin (Phenothrin)	ND	100	ng/l	10	04/12/18 03:52	M-04
Tefluthrin	ND	20	ng/l	10	04/12/18 03:52	M-04
<i>Surrogate(s)</i>						
Perylene-d12	73%	Conc: 184	2-205		04/12/18 03:52	M-04
Triphenyl phosphate	121%	Conc: 302	6-222		04/12/18 03:52	M-04

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 525.2M	Batch ID: W8C1385	Instr: GCMS13	Prepared: 03/23/18 09:40		Analyst: EFC	
Azinphos methyl (Guthion)	ND	50	ng/l	1	03/30/18 21:35	M-02
Bolstar	ND	50	ng/l	1	03/30/18 21:35	M-02
Chlorpyrifos	ND	50	ng/l	1	03/30/18 21:35	M-02
Coumaphos	ND	50	ng/l	1	03/30/18 21:35	M-02
Demeton-o	ND	50	ng/l	1	03/30/18 21:35	M-02
Demeton-s	ND	50	ng/l	1	03/30/18 21:35	M-02
Diazinon	ND	50	ng/l	1	03/30/18 21:35	M-02
Dichlorvos	ND	50	ng/l	1	03/30/18 21:35	M-02
Dimethoate	ND	50	ng/l	1	03/30/18 21:35	M-02
Disulfoton	ND	50	ng/l	1	03/30/18 21:35	M-02
Ethoprop	ND	50	ng/l	1	03/30/18 21:35	M-02
Ethyl parathion	ND	50	ng/l	1	03/30/18 21:35	M-02
Fensulfothion	ND	50	ng/l	1	03/30/18 21:35	M-02
Fenthion	ND	50	ng/l	1	03/30/18 21:35	M-02
Malathion	ND	50	ng/l	1	03/30/18 21:35	M-02
Merphos	ND	50	ng/l	1	03/30/18 21:35	M-02
Methyl parathion	ND	50	ng/l	1	03/30/18 21:35	M-02
Mevinphos	ND	50	ng/l	1	03/30/18 21:35	M-02
Naled	ND	50	ng/l	1	03/30/18 21:35	M-02
Phorate	ND	50	ng/l	1	03/30/18 21:35	M-02
Ronnel	ND	50	ng/l	1	03/30/18 21:35	M-02
Stirophos	ND	50	ng/l	1	03/30/18 21:35	M-02
Tokuthion (Prothifos)	ND	50	ng/l	1	03/30/18 21:35	M-02
Trichloronate	ND	50	ng/l	1	03/30/18 21:35	M-02
<i>Surrogate(s)</i>						

8C22059

Page 13 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#64-5 Sampled: 03/22/18 11:45 by Scott Jordan
8C22059-03 (Water) (Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)						
Method: EPA 525.2M	Batch ID: W8C1385	Instr: GCMS13	Prepared: 03/23/18 09:40		Analyst: EFC	
1,3-Dimethyl-2-nitrobenzene	112% Conc: 2800	76-128			03/30/18 21:35	M-02
Triphenyl phosphate	206% Conc: 5150	40-163			03/30/18 21:35	S-11, M-02



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#168-9
8C22059-04 (Water) Sampled: 03/22/18 13:00 by Scott Jordan

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Anions by IC, EPA Method 300.0						
Method: EPA 300.0	Batch ID: W8C1374	Instr: LC12	Prepared: 03/23/18 08:51		Analyst: jan	
Chloride, Total	32	0.50	mg/l	1	03/23/18 13:41	
NO ₂ +NO ₃ as N	10	0.11	mg/l	1	03/23/18 13:41	
Sulfate as SO ₄	200	2.0	mg/l	4	03/23/18 13:41	

Chlorinated Pesticides and/or PCBs by GC/ECD

Method: EPA 608	Batch ID: W8C1733	Instr: GC07	Prepared: 03/28/18 15:14		Analyst: rmr	
2,4'-DDD		ND	10	ng/l	2	04/03/18 04:07
2,4'-DDE		ND	10	ng/l	2	04/03/18 04:07
2,4'-DDT		ND	10	ng/l	2	04/03/18 04:07
4,4'-DDD		ND	10	ng/l	2	04/03/18 04:07
4,4'-DDE		ND	10	ng/l	2	04/03/18 04:07
4,4'-DDT		ND	10	ng/l	2	04/03/18 04:07
Aldrin		ND	10	ng/l	2	04/03/18 04:07
alpha-BHC		ND	10	ng/l	2	04/03/18 04:07
alpha-Chlordane		ND	10	ng/l	2	04/03/18 04:07
Aroclor 1016		ND	500	ng/l	5	04/06/18 09:10
Aroclor 1221		ND	500	ng/l	5	04/06/18 09:10
Aroclor 1232		ND	500	ng/l	5	04/06/18 09:10
Aroclor 1242		ND	500	ng/l	5	04/06/18 09:10
Aroclor 1248		ND	500	ng/l	5	04/06/18 09:10
Aroclor 1254		ND	500	ng/l	5	04/06/18 09:10
Aroclor 1260		ND	500	ng/l	5	04/06/18 09:10
beta-BHC		ND	10	ng/l	2	04/03/18 04:07
Chlordane (tech)		ND	200	ng/l	2	04/03/18 04:07
cis-Nonachlor		ND	10	ng/l	2	04/03/18 04:07
delta-BHC		ND	10	ng/l	2	04/03/18 04:07
Dieldrin		ND	10	ng/l	2	04/03/18 04:07
Endosulfan I		ND	10	ng/l	2	04/03/18 04:07
Endosulfan II		ND	10	ng/l	2	04/03/18 04:07
Endosulfan sulfate		ND	10	ng/l	2	04/03/18 04:07
Endrin		ND	10	ng/l	2	04/03/18 04:07
Endrin aldehyde		ND	10	ng/l	2	04/03/18 04:07
gamma-BHC (Lindane)		ND	10	ng/l	2	04/03/18 04:07
gamma-Chlordane		ND	10	ng/l	2	04/03/18 04:07
Heptachlor		ND	10	ng/l	2	04/03/18 04:07
Heptachlor epoxide		ND	10	ng/l	2	04/03/18 04:07
Methoxychlor		ND	10	ng/l	2	04/03/18 04:07



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Sample Results

(Continued)

Sample: LAILG-NGA-#168-9	Sampled: 03/22/18 13:00 by Scott Jordan
8C22059-04 (Water)	(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
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Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Method: EPA 608	Batch ID: W8C1733	Instr: GC07	Prepared: 03/28/18 15:14	Analyst:	rmr		
Mirex		ND	10	ng/l	2	04/03/18 04:07	M-04
Toxaphene		ND	2500	ng/l	5	04/06/18 09:10	M-04
trans-Nonachlor		ND	10	ng/l	2	04/03/18 04:07	M-04
<i>Surrogate(s)</i>							
<i>Decachlorobiphenyl</i>		81%	Conc: 81.2	34-125		04/03/18 04:07	M-04
<i>Tetrachloro-meta-xylene</i>		56%	Conc: 56.0	35-111		04/03/18 04:07	M-04

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Method: EPA 350.1	Batch ID: W8C1718	Instr: AA06	Prepared: 03/28/18 12:50	Analyst:	mnq		
Ammonia as N		0.14	0.10	mg/l	1	03/29/18 18:17	
Method: EPA 365.1	Batch ID: W8C1371	Instr: AA01	Prepared: 03/23/18 08:32	Analyst:	AJK		
o-Phosphate as P		0.45	0.010	mg/l	5	03/23/18 10:21	
o-Phosphate as P, dissolved		450	10	ug/l	5	03/23/18 10:21	
Method: EPA 365.1	Batch ID: W8C1539	Instr: AA01	Prepared: 03/26/18 13:21	Analyst:	AJK		
Phosphorus as P, Total		0.69	0.050	mg/l	1	03/30/18 12:49	M-06
Method: EPA 365.1	Batch ID: W8C1540	Instr: AA01	Prepared: 03/26/18 13:20	Analyst:	AJK		
Phosphorus, Dissolved		0.52	0.050	mg/l	1	04/03/18 12:26	M-06
Method: SM 2540C	Batch ID: W8C1574	Instr: Inst	Prepared: 03/26/18 18:08	Analyst:	ymt		
Total Dissolved Solids		470	10	mg/l	1	03/28/18 17:53	
Method: SM 2540D	Batch ID: W8C1745	Instr: Inst	Prepared: 03/28/18 16:54	Analyst:	mic		
Total Suspended Solids		35	5	mg/l	1	03/29/18 12:30	

Metals by EPA 200 Series Methods

Method: EPA 200.7	Batch ID: [CALC]	Instr: [CALC]	Prepared: 03/30/18 18:15	Analyst:	JCK	
Calcium Hardness as CaCO₃		155	0.250	mg/l	1	04/02/18 16:47
Method: EPA 200.7	Batch ID: W8C1899	Instr: ICP03	Prepared: 03/30/18 18:15	Analyst:	JCK	
Calcium, Total		62.0	0.100	mg/l	1	04/02/18 16:47
Method: EPA 200.8	Batch ID: W8C1898	Instr: ICPMS02	Prepared: 03/30/18 18:08	Analyst:	MTT	
Copper, Total		27	0.50	ug/l	1	04/03/18 20:26

Pyrethroid Pesticides by EPA 8270M

Method: EPA 8270M	Batch ID: W8C1588	Instr: GCMS15	Prepared: 03/27/18 08:26	Analyst:	EFC		
Allethrin		ND	40	ng/l	20	04/12/18 04:26	M-04
Bifenthrin		97	40	ng/l	20	04/12/18 04:26	M-04
Cyfluthrin		ND	40	ng/l	20	04/12/18 04:26	M-04
Cypermethrin		ND	40	ng/l	20	04/12/18 04:26	M-04
Deltamethrin/Tralomethrin		ND	40	ng/l	20	04/12/18 04:26	M-04
Dichloran		ND	40	ng/l	20	04/12/18 04:26	M-04
Fenpropathrin (Danitol)		ND	40	ng/l	20	04/12/18 04:26	M-04

8C22059

Page 16 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#168-9
8C22059-04 (Water) Sampled: 03/22/18 13:00 by Scott Jordan
(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Pyrethroid Pesticides by EPA 8270M (Continued)						
Method: EPA 8270M	Batch ID: W8C1588	Instr: GCMS15	Prepared: 03/27/18 08:26		Analyst: EFC	
Fenvalerate/Esfenvalerate	ND	40	ng/l	20	04/12/18 04:26	M-04
L-Cyhalothrin	ND	40	ng/l	20	04/12/18 04:26	M-04
Pendimethalin	ND	40	ng/l	20	04/12/18 04:26	M-04
Permethrin	ND	100	ng/l	20	04/12/18 04:26	M-04
Prallethrin	ND	40	ng/l	20	04/12/18 04:26	M-04
Sumithrin (Phenothrin)	ND	200	ng/l	20	04/12/18 04:26	M-04
Tefluthrin	ND	40	ng/l	20	04/12/18 04:26	M-04
<i>Surrogate(s)</i>						
Perylene-d12	73%	Conc: 181	2-205		04/12/18 04:26	M-04
Triphenyl phosphate	88%	Conc: 221	6-222		04/12/18 04:26	M-04

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Method: EPA 525.2M	Batch ID: W8C1385	Instr: GCMS13	Prepared: 03/23/18 09:40		Analyst: EFC	
Azinphos methyl (Guthion)	ND	50	ng/l	1	03/30/18 22:01	M-02
Bolstar	ND	50	ng/l	1	03/30/18 22:01	M-02
Chlorpyrifos	ND	50	ng/l	1	03/30/18 22:01	M-02
Coumaphos	ND	50	ng/l	1	03/30/18 22:01	M-02
Demeton-o	ND	50	ng/l	1	03/30/18 22:01	M-02
Demeton-s	ND	50	ng/l	1	03/30/18 22:01	M-02
Diazinon	ND	50	ng/l	1	03/30/18 22:01	M-02
Dichlorvos	ND	50	ng/l	1	03/30/18 22:01	M-02
Dimethoate	ND	50	ng/l	1	03/30/18 22:01	M-02
Disulfoton	ND	50	ng/l	1	03/30/18 22:01	M-02
Ethoprop	ND	50	ng/l	1	03/30/18 22:01	M-02
Ethyl parathion	ND	50	ng/l	1	03/30/18 22:01	M-02
Fensulfothion	ND	50	ng/l	1	03/30/18 22:01	M-02
Fenthion	ND	50	ng/l	1	03/30/18 22:01	M-02
Malathion	ND	50	ng/l	1	03/30/18 22:01	M-02
Merphos	ND	50	ng/l	1	03/30/18 22:01	M-02
Methyl parathion	ND	50	ng/l	1	03/30/18 22:01	M-02
Mevinphos	ND	50	ng/l	1	03/30/18 22:01	M-02
Naled	ND	50	ng/l	1	03/30/18 22:01	M-02
Phorate	ND	50	ng/l	1	03/30/18 22:01	M-02
Ronnel	ND	50	ng/l	1	03/30/18 22:01	M-02
Stirophos	ND	50	ng/l	1	03/30/18 22:01	M-02
Tokuthion (Prothifos)	ND	50	ng/l	1	03/30/18 22:01	M-02
Trichloronate	ND	50	ng/l	1	03/30/18 22:01	M-02
<i>Surrogate(s)</i>						

8C22059

Page 17 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Sample Results

(Continued)

Sample: LAILG-NGA-#168-9
8C22059-04 (Water) Sampled: 03/22/18 13:00 by Scott Jordan
(Continued)

Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)						
Method: EPA 525.2M	Batch ID: W8C1385	Instr: GCMS13	Prepared: 03/23/18 09:40		Analyst: EFC	
1,3-Dimethyl-2-nitrobenzene	115% Conc: 2880	76-128			03/30/18 22:01	M-02
Triphenyl phosphate	151% Conc: 3770	40-163			03/30/18 22:01	M-02



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Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

Anions by IC, EPA Method 300.0

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1374 - EPA 300.0										
Blank (W8C1374-BLK1)										
Chloride, Total										
ND										
NO ₂ +NO ₃ as N										
ND										
Sulfate as SO ₄										
ND										
LCS (W8C1374-BS1)										
Chloride, Total										
9.96										
NO ₂ +NO ₃ as N										
3.87										
Sulfate as SO ₄										
10.6										
Matrix Spike (W8C1374-MS1)										
Chloride, Total										
124										
NO ₂ +NO ₃ as N										
47.8										
Sulfate as SO ₄										
166										
Matrix Spike (W8C1374-MS2)										
Chloride, Total										
104										
NO ₂ +NO ₃ as N										
40.5										
Sulfate as SO ₄										
137										
Matrix Spike Dup (W8C1374-MSD1)										
Chloride, Total										
124										
NO ₂ +NO ₃ as N										
47.7										
Sulfate as SO ₄										
165										
Matrix Spike Dup (W8C1374-MSD2)										
Chloride, Total										
104										
NO ₂ +NO ₃ as N										
40.4										
Sulfate as SO ₄										
136										



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1733 - EPA 608										
Blank (W8C1733-BLK1)										
2,4'-DDD	ND	5.0	ng/l							
2,4'-DDE	ND	5.0	ng/l							
2,4'-DDT	ND	5.0	ng/l							
4,4'-DDD	ND	5.0	ng/l							
4,4'-DDE	ND	5.0	ng/l							
4,4'-DDT	ND	5.0	ng/l							
Aldrin	ND	5.0	ng/l							
alpha-BHC	ND	5.0	ng/l							
alpha-Chlordane	ND	5.0	ng/l							
Aroclor 1016	ND	100	ng/l							
Aroclor 1221	ND	100	ng/l							
Aroclor 1232	ND	100	ng/l							
Aroclor 1242	ND	100	ng/l							
Aroclor 1248	ND	100	ng/l							
Aroclor 1254	ND	100	ng/l							
Aroclor 1260	ND	100	ng/l							
beta-BHC	ND	5.0	ng/l							
Chlordane (tech)	ND	100	ng/l							
cis-Nonachlor	ND	5.0	ng/l							
delta-BHC	ND	5.0	ng/l							
Dieldrin	ND	5.0	ng/l							
Endosulfan I	ND	5.0	ng/l							
Endosulfan II	ND	5.0	ng/l							
Endosulfan sulfate	ND	5.0	ng/l							
Endrin	ND	5.0	ng/l							
Endrin aldehyde	ND	5.0	ng/l							
gamma-BHC (Lindane)	ND	5.0	ng/l							
gamma-Chlordane	ND	5.0	ng/l							
Heptachlor	ND	5.0	ng/l							
Heptachlor epoxide	ND	5.0	ng/l							
Methoxychlor	ND	5.0	ng/l							
Mirex	ND	5.0	ng/l							
Toxaphene	ND	500	ng/l							
trans-Nonachlor	ND	5.0	ng/l							
Surrogate(s)										
Decachlorobiphenyl		117	ng/l	100		117	34-125			
Tetrachloro-meta-xylene		84.8	ng/l	100		85	35-111			



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1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1733 - EPA 608 (Continued)										
Blank (W8C1733-BLK2)					Prepared: 03/28/18 Analyzed: 04/06/18					
2,4'-DDD	ND	5.0	ng/l							QC-2
2,4'-DDE	ND	5.0	ng/l							QC-2
2,4'-DDT	ND	5.0	ng/l							QC-2
4,4'-DDD	ND	5.0	ng/l							QC-2
4,4'-DDE	ND	5.0	ng/l							QC-2
4,4'-DDT	ND	5.0	ng/l							QC-2
Aldrin	ND	5.0	ng/l							QC-2
alpha-BHC	ND	5.0	ng/l							QC-2
alpha-Chlordane	ND	5.0	ng/l							QC-2
Aroclor 1016	ND	100	ng/l							QC-2
Aroclor 1221	ND	100	ng/l							QC-2
Aroclor 1232	ND	100	ng/l							QC-2
Aroclor 1242	ND	100	ng/l							QC-2
Aroclor 1248	ND	100	ng/l							QC-2
Aroclor 1254	ND	100	ng/l							QC-2
Aroclor 1260	ND	100	ng/l							QC-2
beta-BHC	ND	5.0	ng/l							QC-2
Chlordane (tech)	ND	100	ng/l							QC-2
cis-Nonachlor	ND	5.0	ng/l							QC-2
delta-BHC	ND	5.0	ng/l							QC-2
Dieldrin	ND	5.0	ng/l							QC-2
Endosulfan I	ND	5.0	ng/l							QC-2
Endosulfan II	ND	5.0	ng/l							QC-2
Endosulfan sulfate	ND	5.0	ng/l							QC-2
Endrin	ND	5.0	ng/l							QC-2
Endrin aldehyde	ND	5.0	ng/l							QC-2
gamma-BHC (Lindane)	ND	5.0	ng/l							QC-2
gamma-Chlordane	ND	5.0	ng/l							QC-2
Heptachlor	ND	5.0	ng/l							QC-2
Heptachlor epoxide	ND	5.0	ng/l							QC-2
Methoxychlor	ND	5.0	ng/l							QC-2
Mirex	ND	5.0	ng/l							QC-2
Toxaphene	ND	500	ng/l							QC-2
trans-Nonachlor	ND	5.0	ng/l							QC-2
<i>Surrogate(s)</i>										
Decachlorobiphenyl		102	ng/l	100		102	34-125			QC-2
Tetrachloro-meta-xylene		81.8	ng/l	100		82	35-111			QC-2

8C22059

Page 21 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1733 - EPA 608 (Continued)										
LCS (W8C1733-BS1)										
4,4'-DDD	107	5.0	ng/l	100	107	42-133				
4,4'-DDE	99.2	5.0	ng/l	100	99	33-126				
4,4'-DDT	116	5.0	ng/l	100	116	35-147				
Aldrin	90.5	5.0	ng/l	100	90	18-117				
alpha-BHC	93.0	5.0	ng/l	100	93	47-119				
beta-BHC	108	5.0	ng/l	100	108	53-123				
delta-BHC	109	5.0	ng/l	100	109	51-123				
Dieldrin	98.6	5.0	ng/l	100	99	48-123				
Endosulfan I	88.8	5.0	ng/l	100	89	14-131				
Endosulfan II	97.7	5.0	ng/l	100	98	40-121				
Endosulfan sulfate	121	5.0	ng/l	100	121	44-140				
Endrin	113	5.0	ng/l	100	113	40-143				
Endrin aldehyde	105	5.0	ng/l	100	105	18-136				
gamma-BHC (Lindane)	93.5	5.0	ng/l	100	94	49-117				
Heptachlor	91.9	5.0	ng/l	100	92	31-130				
Heptachlor epoxide	94.1	5.0	ng/l	100	94	49-122				
Surrogate(s)										
Decachlorobiphenyl		114	ng/l	100	114	34-125				
Tetrachloro-meta-xylene		95.4	ng/l	100	95	35-111				
LCS (W8C1733-BS2)										
4,4'-DDD	101	5.0	ng/l	100	101	42-133				QC-2
4,4'-DDE	93.7	5.0	ng/l	100	94	33-126				QC-2
4,4'-DDT	107	5.0	ng/l	100	107	35-147				QC-2
Aldrin	88.7	5.0	ng/l	100	89	18-117				QC-2
alpha-BHC	93.6	5.0	ng/l	100	94	47-119				QC-2
beta-BHC	104	5.0	ng/l	100	104	53-123				QC-2
delta-BHC	105	5.0	ng/l	100	105	51-123				QC-2
Dieldrin	95.0	5.0	ng/l	100	95	48-123				QC-2
Endosulfan I	85.1	5.0	ng/l	100	85	14-131				QC-2
Endosulfan II	92.8	5.0	ng/l	100	93	40-121				QC-2
Endosulfan sulfate	122	5.0	ng/l	100	122	44-140				QC-2
Endrin	98.9	5.0	ng/l	100	99	40-143				QC-2
Endrin aldehyde	110	5.0	ng/l	100	110	18-136				QC-2
gamma-BHC (Lindane)	93.5	5.0	ng/l	100	93	49-117				QC-2
Heptachlor	93.1	5.0	ng/l	100	93	31-130				QC-2
Heptachlor epoxide	93.7	5.0	ng/l	100	94	49-122				QC-2
Surrogate(s)										
Decachlorobiphenyl		112	ng/l	100	112	34-125				QC-2

8C22059

Page 22 of 37



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan



Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1733 - EPA 608 (Continued)										
LCS (W8C1733-BS2)										
<i>Surrogate(s)</i>										
Tetrachloro-meta-xylene		93.5	ng/l	100	93	35-111				QC-2
Matrix Spike (W8C1733-MS1)	Source: 8C22059-02				Prepared: 03/28/18	Analyzed: 04/02/18				
4,4'-DDD	49.9	10	ng/l	100	ND	50	23-124			M-04
4,4'-DDE	49.2	10	ng/l	100	ND	49	30-114			M-04
4,4'-DDT	54.5	10	ng/l	100	ND	54	11-151			M-04
Aldrin	46.4	10	ng/l	100	ND	46	18-110			M-04
alpha-BHC	48.6	10	ng/l	100	ND	49	43-114			M-04
beta-BHC	45.2	10	ng/l	100	ND	45	24-135			M-04
delta-BHC	47.6	10	ng/l	100	ND	48	37-122			M-04
Dieldrin	51.0	10	ng/l	100	ND	51	27-132			M-04
Endosulfan I	50.7	10	ng/l	100	ND	51	0.1-140			M-04
Endosulfan II	49.7	10	ng/l	100	ND	50	17-122			M-04
Endosulfan sulfate	34.7	10	ng/l	100	ND	35	37-131			M-04, MS-05
Endrin	62.9	10	ng/l	100	ND	63	42-144			M-04
Endrin aldehyde	49.6	10	ng/l	100	ND	50	11-113			M-04
gamma-BHC (Lindane)	54.1	10	ng/l	100	ND	54	33-112			M-04
Heptachlor	60.2	10	ng/l	100	ND	60	28-131			M-04
Heptachlor epoxide	44.6	10	ng/l	100	ND	45	36-117			M-04
<i>Surrogate(s)</i>										
Decachlorobiphenyl		22.0	ng/l	100		22	34-125			M-04, S-GC
Tetrachloro-meta-xylene		50.6	ng/l	100		51	35-111			M-04
Matrix Spike (W8C1733-MS2)	Source: 8C22030-01				Prepared: 03/28/18	Analyzed: 04/02/18				
4,4'-DDD	68.7	10	ng/l	100	ND	69	23-124			M-04
4,4'-DDE	58.3	10	ng/l	100	ND	58	30-114			M-04
4,4'-DDT	57.4	10	ng/l	100	ND	57	11-151			M-04
Aldrin	56.0	10	ng/l	100	ND	56	18-110			M-04
alpha-BHC	57.0	10	ng/l	100	ND	57	43-114			M-04
beta-BHC	59.2	10	ng/l	100	ND	59	24-135			M-04
delta-BHC	67.5	10	ng/l	100	ND	68	37-122			M-04
Dieldrin	63.2	10	ng/l	100	ND	63	27-132			M-04
Endosulfan I	52.3	10	ng/l	100	ND	52	0.1-140			M-04
Endosulfan II	59.1	10	ng/l	100	ND	59	17-122			M-04
Endosulfan sulfate	52.7	10	ng/l	100	ND	53	37-131			M-04
Endrin	75.5	10	ng/l	100	ND	75	42-144			M-04
Endrin aldehyde	57.3	10	ng/l	100	ND	57	11-113			M-04
gamma-BHC (Lindane)	60.8	10	ng/l	100	ND	61	33-112			M-04



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1733 - EPA 608 (Continued)										
Matrix Spike (W8C1733-MS2)										
Heptachlor										
Heptachlor epoxide										
<i>Surrogate(s)</i>										
<i>Decachlorobiphenyl</i>										
<i>Tetrachloro-meta-xylene</i>										
Matrix Spike Dup (W8C1733-MSD1)										
4,4'-DDD										
4,4'-DDE										
4,4'-DDT										
Aldrin										
alpha-BHC										
beta-BHC										
delta-BHC										
Dieldrin										
Endosulfan I										
Endosulfan II										
Endosulfan sulfate										
Endrin										
Endrin aldehyde										
<i>gamma-BHC (Lindane)</i>										
Heptachlor										
Heptachlor epoxide										
<i>Surrogate(s)</i>										
<i>Decachlorobiphenyl</i>										
<i>Tetrachloro-meta-xylene</i>										
Matrix Spike Dup (W8C1733-MSD2)										
4,4'-DDD										
4,4'-DDE										
4,4'-DDT										
Aldrin										
alpha-BHC										
beta-BHC										
delta-BHC										
Dieldrin										
Endosulfan I										
Endosulfan II										
Endosulfan sulfate										



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

 Quality Control Results

(Continued)

Chlorinated Pesticides and/or PCBs by GC/ECD (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1733 - EPA 608 (Continued)										
Matrix Spike Dup (W8C1733-MSD2)										
Source: 8C22030-01 Prepared: 03/28/18 Analyzed: 04/02/18										
Endrin	76.3	10	ng/l	100	ND	76	42-144	1	30	M-04
Endrin aldehyde	55.6	10	ng/l	100	ND	56	11-113	3	30	M-04
gamma-BHC (Lindane)	60.3	10	ng/l	100	ND	60	33-112	0.9	30	M-04
Heptachlor	55.8	10	ng/l	100	ND	56	28-131	6	30	M-04
Heptachlor epoxide	56.0	10	ng/l	100	ND	56	36-117	7	30	M-04
<i>Surrogate(s)</i>										
Decachlorobiphenyl		67.1	ng/l	100		67	34-125			M-04
Tetrachloro-meta-xylene		41.7	ng/l	100		42	35-111			M-04



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
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Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1371 - EPA 365.1										
Blank (W8C1371-BLK1)										
o-Phosphate as P	ND	0.0020	mg/l		Prepared & Analyzed: 03/23/18					
o-Phosphate as P, dissolved	ND	2.0	ug/l							
LCS (W8C1371-BS1)										
o-Phosphate as P	0.0547	0.0020	mg/l	0.0500		109	90-110			
o-Phosphate as P, dissolved	54.7	2.0	ug/l	50.0		109	90-110			
Matrix Spike (W8C1371-MS1)										
o-Phosphate as P	0.735	0.010	mg/l	0.250	0.484	101	90-110			
o-Phosphate as P, dissolved	735	10	ug/l	250	483	101	90-110			
Matrix Spike Dup (W8C1371-MSD1)										
o-Phosphate as P	0.735	0.010	mg/l	0.250	0.484	101	90-110	0	20	
o-Phosphate as P, dissolved	735	10	ug/l	250	483	101	90-110	0	20	
Batch: W8C1539 - EPA 365.1										
Blank (W8C1539-BLK1)										
Phosphorus as P, Total	ND	0.010	mg/l		Prepared: 03/26/18 Analyzed: 03/30/18					
LCS (W8C1539-BS1)										
Phosphorus as P, Total	0.0527	0.010	mg/l	0.0500		105	90-110			
Matrix Spike (W8C1539-MS1)										
Phosphorus as P, Total	0.472	0.040	mg/l	0.200	0.352	60	90-110			MS-02
Matrix Spike (W8C1539-MS2)										
Phosphorus as P, Total	0.336	0.040	mg/l	0.200	0.214	61	90-110			MS-02
Matrix Spike Dup (W8C1539-MSD1)										
Phosphorus as P, Total	0.492	0.040	mg/l	0.200	0.352	70	90-110	4	20	MS-02
Matrix Spike Dup (W8C1539-MSD2)										
Phosphorus as P, Total	0.348	0.040	mg/l	0.200	0.214	67	90-110	3	20	MS-02
Batch: W8C1540 - EPA 365.1										
Blank (W8C1540-BLK1)										
Phosphorus, Dissolved	ND	0.010	mg/l		Prepared: 03/26/18 Analyzed: 04/03/18					
LCS (W8C1540-BS1)										
Phosphorus, Dissolved	0.0501	0.010	mg/l	0.0500		100	90-110			
Matrix Spike (W8C1540-MS1)										
Phosphorus, Dissolved	0.193	0.020	mg/l	0.100	0.0940	99	90-110			
Matrix Spike Dup (W8C1540-MSD1)										
Phosphorus, Dissolved	0.194	0.020	mg/l	0.100	0.0940	100	90-110	0.2	20	
Batch: W8C1574 - SM 2540C										
Blank (W8C1574-BLK1)										
Total Dissolved Solids	ND	10	mg/l		Prepared: 03/26/18 Analyzed: 03/28/18					



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
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Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1574 - SM 2540C (Continued)										
LCS (W8C1574-BS1) Total Dissolved Solids	827	10	mg/l	Prepared: 03/26/18 Analyzed: 03/28/18 824	100	96-102				
Duplicate (W8C1574-DUP1) Total Dissolved Solids	2180	10	mg/l	Source: 8C22030-01 Prepared: 03/26/18 Analyzed: 03/28/18 2090				4	10	
Duplicate (W8C1574-DUP2) Total Dissolved Solids	2740	10	mg/l	Source: 8C22065-01 Prepared: 03/26/18 Analyzed: 03/28/18 2520				8	10	
Batch: W8C1629 - SM 2540D										
Blank (W8C1629-BLK1) Total Suspended Solids	ND	5	mg/l	Prepared: 03/27/18 Analyzed: 03/28/18						
LCS (W8C1629-BS1) Total Suspended Solids	64.0	5	mg/l	Prepared: 03/27/18 Analyzed: 03/28/18 62.6	102	90-110				
Duplicate (W8C1629-DUP1) Total Suspended Solids	1.00	5	mg/l	Source: 8C22012-03 Prepared: 03/27/18 Analyzed: 03/28/18 1.00				0	20	
Duplicate (W8C1629-DUP2) Total Suspended Solids	1.00	5	mg/l	Source: 8C22084-01 Prepared: 03/27/18 Analyzed: 03/28/18 ND				200	20	R-03
Batch: W8C1630 - SM 2540D										
Blank (W8C1630-BLK1) Total Suspended Solids	ND	5	mg/l	Prepared: 03/27/18 Analyzed: 03/28/18						
LCS (W8C1630-BS1) Total Suspended Solids	60.0	5	mg/l	Prepared: 03/27/18 Analyzed: 03/28/18 54.9	109	90-110				
Duplicate (W8C1630-DUP1) Total Suspended Solids	17.0	5	mg/l	Source: 8C22068-01 Prepared: 03/27/18 Analyzed: 03/28/18 16.0				6	20	
Duplicate (W8C1630-DUP2) Total Suspended Solids	21.0	5	mg/l	Source: 8C23013-01 Prepared: 03/27/18 Analyzed: 03/28/18 20.0				5	20	
Batch: W8C1697 - EPA 350.1										
Blank (W8C1697-BLK1) Ammonia as N	ND	0.10	mg/l	Prepared: 03/28/18 Analyzed: 03/29/18						
Blank (W8C1697-BLK2) Ammonia as N	ND	0.10	mg/l	Prepared: 03/28/18 Analyzed: 03/29/18						
LCS (W8C1697-BS1) Ammonia as N	0.246	0.10	mg/l	Prepared: 03/28/18 Analyzed: 03/29/18 0.250	99	90-110				
LCS (W8C1697-BS2) Ammonia as N	0.246	0.10	mg/l	Prepared: 03/28/18 Analyzed: 03/29/18 0.250	99	90-110				
Matrix Spike (W8C1697-MS1) Ammonia as N	0.369	0.10	mg/l	Source: 8C26027-01 Prepared: 03/28/18 Analyzed: 03/29/18 0.250	0.120	100	90-110			
Matrix Spike (W8C1697-MS2) Ammonia as N	0.365	0.10	mg/l	Source: 8C26027-02 Prepared: 03/28/18 Analyzed: 03/29/18 0.250	0.106	104	90-110			



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit	Qualifier
Batch: W8C1697 - EPA 350.1 (Continued)										
Matrix Spike Dup (W8C1697-MSD1)										
Ammonia as N										
Source: 8C26027-01										
Prepared: 03/28/18 Analyzed: 03/29/18										
0.371										
mg/l										
Matrix Spike Dup (W8C1697-MSD2)										
Ammonia as N										
Source: 8C26027-02										
Prepared: 03/28/18 Analyzed: 03/29/18										
0.365										
mg/l										
Batch: W8C1718 - EPA 350.1										
Blank (W8C1718-BLK1)										
Ammonia as N										
ND										
mg/l										
Blank (W8C1718-BLK2)										
Ammonia as N										
ND										
mg/l										
LCS (W8C1718-BS1)										
Ammonia as N										
0.248										
mg/l										
LCS (W8C1718-BS2)										
Ammonia as N										
0.249										
mg/l										
Matrix Spike (W8C1718-MS1)										
Ammonia as N										
0.552										
mg/l										
Matrix Spike (W8C1718-MS2)										
Ammonia as N										
0.597										
mg/l										
Matrix Spike Dup (W8C1718-MSD1)										
Ammonia as N										
0.546										
mg/l										
Matrix Spike Dup (W8C1718-MSD2)										
Ammonia as N										
0.599										
mg/l										
Batch: W8C1744 - SM 2540D										
Blank (W8C1744-BLK1)										
Total Suspended Solids										
ND										
mg/l										
LCS (W8C1744-BS1)										
Total Suspended Solids										
57.0										
mg/l										
55.4										
103										
90-110										
Duplicate (W8C1744-DUP1)										
Total Suspended Solids										
2.00										
mg/l										
ND										
200										
20										
R-03										
Duplicate (W8C1744-DUP2)										
Total Suspended Solids										
290										
mg/l										
266										
9										
20										
Batch: W8C1745 - SM 2540D										
Blank (W8C1745-BLK1)										
Total Suspended Solids										
ND										
mg/l										
58.9										
107										
90-110										
LCS (W8C1745-BS1)										
Total Suspended Solids										
63.0										
mg/l										
57.1										
109										
90-110										



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association

Reported:

04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1745 - SM 2540D (Continued)										
Duplicate (W8C1745-DUP1)										
Total Suspended Solids	3.00	5	mg/l		Prepared: 03/28/18 Analyzed: 03/29/18			200	20	R-03
1.00										
Duplicate (W8C1745-DUP2)										
Total Suspended Solids	3.00	5	mg/l		Prepared: 03/28/18 Analyzed: 03/29/18			100	20	R-03
1.00										
Metals by EPA 200 Series Methods										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1898 - EPA 200.8										
Blank (W8C1898-BLK1)										
Copper, Total	ND	0.50	ug/l		Prepared: 03/30/18 Analyzed: 04/03/18					
LCS (W8C1898-BS1)										
Copper, Total	50.5	0.50	ug/l	50.0		101	85-115			
Matrix Spike (W8C1898-MS1)										
Copper, Total	94.2	0.50	ug/l	50.0	47.9	93	70-130			
Matrix Spike (W8C1898-MS2)										
Copper, Total	68.9	0.50	ug/l	50.0	25.0	88	70-130			
Matrix Spike Dup (W8C1898-MSD1)										
Copper, Total	94.7	0.50	ug/l	50.0	47.9	93	70-130	0.4	30	
Matrix Spike Dup (W8C1898-MSD2)										
Copper, Total	69.5	0.50	ug/l	50.0	25.0	89	70-130	0.9	30	
Batch: W8C1899 - EPA 200.7										
Blank (W8C1899-BLK1)										
Calcium, Total	ND	0.100	mg/l		Prepared: 03/30/18 Analyzed: 04/02/18					
LCS (W8C1899-BS1)										
Calcium, Total	46.9	0.100	mg/l	50.0		94	85-115			
Matrix Spike (W8C1899-MS1)										
Calcium, Total	64.9	0.100	mg/l	50.0	17.9	94	70-130			
Matrix Spike Dup (W8C1899-MSD1)										
Calcium, Total	64.7	0.100	mg/l	50.0	17.9	94	70-130	0.3	30	



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Quality Control Results

(Continued)

Pyrethroid Pesticides by EPA 8270M

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1588 - EPA 8270M										
Blank (W8C1588-BLK1)										
Prepared: 03/27/18 Analyzed: 04/11/18										
Allethrin	ND	2.0	ng/l							
Bifenthrin	ND	2.0	ng/l							
Cyfluthrin	ND	2.0	ng/l							
Cypermethrin	ND	2.0	ng/l							
Deltamethrin/Tralomethrin	ND	2.0	ng/l							
Desulfinylfipronil	ND	2.0	ng/l							
Dichloran	ND	2.0	ng/l							
Fenpropathrin (Danitol)	ND	2.0	ng/l							
Fenvalerate/Esfenvalerate	ND	2.0	ng/l							
Fipronil	ND	2.0	ng/l							
Fipronil sulfide	ND	2.0	ng/l							
Fipronil sulfone	ND	2.0	ng/l							
L-Cyhalothrin	ND	2.0	ng/l							
Pendimethalin	ND	2.0	ng/l							
Permethrin	ND	5.0	ng/l							
Prallethrin	ND	2.0	ng/l							
Sumithrin (Phenothrin)	ND	10	ng/l							
Tefluthrin	ND	2.0	ng/l							
<i>Surrogate(s)</i>										
<i>Perlyene-d12</i>	225	ng/l	250			90	2-205			
<i>Triphenyl phosphate</i>	243	ng/l	250			97	6-222			
LCS (W8C1588-BS1)										
Prepared: 03/27/18 Analyzed: 04/11/18										
Allethrin	39.0	2.0	ng/l	50.0		78	50-150			
Bifenthrin	50.8	2.0	ng/l	50.0		102	50-150			
Cyfluthrin	50.5	2.0	ng/l	50.0		101	50-150			
Cypermethrin	49.2	2.0	ng/l	50.0		98	50-150			
Deltamethrin/Tralomethrin	49.6	2.0	ng/l	50.0		99	50-150			
Desulfinylfipronil	43.8	2.0	ng/l	50.0		88	50-150			
Dichloran	39.4	2.0	ng/l	50.0		79	50-150			
Fenpropathrin (Danitol)	45.7	2.0	ng/l	50.0		91	50-150			
Fenvalerate/Esfenvalerate	48.3	2.0	ng/l	50.0		97	50-150			
Fipronil	58.1	2.0	ng/l	50.0		116	50-150			
Fipronil sulfide	47.4	2.0	ng/l	50.0		95	50-150			
Fipronil sulfone	43.4	2.0	ng/l	50.0		87	50-150			
L-Cyhalothrin	48.6	2.0	ng/l	50.0		97	50-150			
Pendimethalin	38.8	2.0	ng/l	50.0		78	50-150			
Permethrin	53.0	5.0	ng/l	50.0		106	50-150			



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
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Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Quality Control Results

(Continued)

Pyrethroid Pesticides by EPA 8270M (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1588 - EPA 8270M (Continued)										
LCS (W8C1588-BS1)										
Prepared: 03/27/18 Analyzed: 04/11/18										
Prallethrin	43.7	2.0	ng/l	50.0	87	50-150				
Sumithrin (Phenothrin)	60.7	10	ng/l	50.0	121	50-150				
Tefluthrin	43.2	2.0	ng/l	50.0	86	50-150				
<i>Surrogate(s)</i>										
Perylene-d12		215	ng/l	250	86	2-205				
Triphenyl phosphate		222	ng/l	250	89	6-222				
LCS Dup (W8C1588-BSD1)										
Prepared: 03/27/18 Analyzed: 04/11/18										
Allethrin	49.0	2.0	ng/l	50.0	98	50-150	23	50		
Bifenthrin	64.9	2.0	ng/l	50.0	130	50-150	24	50		
Cyfluthrin	71.3	2.0	ng/l	50.0	143	50-150	34	50		
Cypermethrin	59.4	2.0	ng/l	50.0	119	50-150	19	50		
Deltamethrin/Tralomethrin	74.0	2.0	ng/l	50.0	148	50-150	39	50		
Desulfinylfipronil	46.7	2.0	ng/l	50.0	93	50-150	6	50		
Dichloran	37.6	2.0	ng/l	50.0	75	50-150	5	50		
Fenpropathrin (Danitol)	59.7	2.0	ng/l	50.0	119	50-150	27	50		
Fenvalerate/Esfenvalerate	69.7	2.0	ng/l	50.0	139	50-150	36	50		
Fipronil	64.7	2.0	ng/l	50.0	129	50-150	11	50		
Fipronil sulfide	55.1	2.0	ng/l	50.0	110	50-150	15	50		
Fipronil sulfone	53.6	2.0	ng/l	50.0	107	50-150	21	50		
L-Cyhalothrin	55.9	2.0	ng/l	50.0	112	50-150	14	50		
Pendimethalin	44.1	2.0	ng/l	50.0	88	50-150	13	50		
Permethrin	53.8	5.0	ng/l	50.0	108	50-150	2	50		
Prallethrin	51.3	2.0	ng/l	50.0	103	50-150	16	50		
Sumithrin (Phenothrin)	68.9	10	ng/l	50.0	138	50-150	13	50		
Tefluthrin	44.9	2.0	ng/l	50.0	90	50-150	4	50		
<i>Surrogate(s)</i>										
Perylene-d12		246	ng/l	250	98	2-205				
Triphenyl phosphate		256	ng/l	250	102	6-222				



WECK LABORATORIES, INC.

Pacific Ridgeline - Ventura CA
1891 Goodyear Avenue, Suite 621
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Certificate of Analysis

FINAL REPORT

Project Number: Nursery Growers Association
Project Manager: Scott Jordan

Reported:
04/20/2018 09:51

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1385 - EPA 525.2M										
Blank (W8C1385-BLK1)										
Prepared: 03/23/18 Analyzed: 03/30/18										
Azinphos methyl (Guthion)	ND	10	ng/l							
Bolstar	ND	10	ng/l							
Chlorpyrifos	ND	10	ng/l							
Coumaphos	ND	10	ng/l							
Demeton-o	ND	10	ng/l							
Demeton-s	ND	10	ng/l							
Diazinon	ND	10	ng/l							
Dichlorvos	ND	10	ng/l							
Dimethoate	ND	10	ng/l							
Disulfoton	ND	10	ng/l							
Ethoprop	ND	10	ng/l							
Ethyl parathion	ND	10	ng/l							
Fensulfothion	ND	10	ng/l							
Fenthion	ND	10	ng/l							
Malathion	ND	10	ng/l							
Morphos	ND	10	ng/l							
Methyl parathion	ND	10	ng/l							
Mevinphos	ND	10	ng/l							
Naled	ND	10	ng/l							
Phorate	ND	10	ng/l							
Ronnel	ND	10	ng/l							
Stirophos	ND	10	ng/l							
Tokuthion (Prothiofos)	ND	10	ng/l							
Trichloronate	ND	10	ng/l							
Surrogate(s)										
1,3-Dimethyl-2-nitrobenzene	339	ng/l	500		68	76-128				S-11
Triphenyl phosphate	506	ng/l	500		101	40-163				
LCS (W8C1385-BS1)										
Prepared: 03/23/18 Analyzed: 03/30/18										
Azinphos methyl (Guthion)	57.1	10	ng/l	50.0	114	0.1-188				
Bolstar	35.8	10	ng/l	50.0	72	11-166				
Chlorpyrifos	41.0	10	ng/l	50.0	82	37-169				
Coumaphos	49.3	10	ng/l	50.0	99	0.1-225				
Demeton-o	29.4	10	ng/l	50.0	59	0.1-211				
Demeton-s	39.4	10	ng/l	50.0	79	0.1-213				
Diazinon	30.9	10	ng/l	50.0	62	43-152				
Dichlorvos	31.7	10	ng/l	50.0	63	46-133				
Dimethoate	40.3	10	ng/l	50.0	81	10-234				



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04/20/2018 09:51

Project Manager: Scott Jordan

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1385 - EPA 525.2M (Continued)										
LCS (W8C1385-BS1)					Prepared: 03/23/18 Analyzed: 03/30/18					
Disulfoton	25.9	10	ng/l	50.0		52	0.1-212			
Ethoprop	34.0	10	ng/l	50.0		68	53-163			
Ethyl parathion	54.2	10	ng/l	50.0		108	7-230			
Fensulfothion	39.1	10	ng/l	50.0		78	0.1-265			
Fenthion	29.9	10	ng/l	50.0		60	20-177			
Malathion	40.1	10	ng/l	50.0		80	14-175			
Morphos	39.0	10	ng/l	50.0		78	28-181			
Methyl parathion	56.3	10	ng/l	50.0		113	0.1-252			
Mevinphos	30.9	10	ng/l	50.0		62	14-202			
Naled	5.67	10	ng/l	50.0		11	0.1-240			
Phorate	40.9	10	ng/l	50.0		82	26-180			
Ronnel	39.9	10	ng/l	50.0		80	34-154			
Stirophos	58.5	10	ng/l	50.0		117	0.1-188			
Tokuthion (Prothifos)	37.8	10	ng/l	50.0		76	23-159			
Trichloronate	41.2	10	ng/l	50.0		82	34-153			
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene		357	ng/l	500		71	76-128			S-11
Triphenyl phosphate		499	ng/l	500		100	40-163			
Matrix Spike (W8C1385-MS1)										
				Source: 8C22030-01	Prepared: 03/23/18 Analyzed: 03/30/18					
Azinphos methyl (Guthion)	78.5	10	ng/l	50.0	ND	157	0.1-154			MS-05
Bolstar	43.3	10	ng/l	50.0	ND	87	4-184			
Chlorpyrifos	62.2	10	ng/l	50.0	ND	124	37-168			
Coumaphos	67.6	10	ng/l	50.0	ND	135	0.1-203			
Demeton-o	38.3	10	ng/l	50.0	ND	77	0.1-208			
Demeton-s	49.6	10	ng/l	50.0	ND	99	0.1-207			
Diazinon	55.2	10	ng/l	50.0	ND	110	36-153			
Dichlorvos	43.5	10	ng/l	50.0	ND	87	42-137			
Dimethoate	85.0	10	ng/l	50.0	ND	170	4-222			
Disulfoton	37.1	10	ng/l	50.0	ND	74	12-199			
Ethoprop	55.1	10	ng/l	50.0	ND	110	51-167			
Ethyl parathion	67.9	10	ng/l	50.0	ND	136	5-229			
Fensulfothion	55.5	10	ng/l	50.0	ND	111	0.1-316			
Fenthion	50.5	10	ng/l	50.0	ND	101	23-169			
Malathion	66.3	10	ng/l	50.0	12.7	107	6-184			
Morphos	40.8	10	ng/l	50.0	ND	82	3-210			
Methyl parathion	71.5	10	ng/l	50.0	ND	143	0.1-249			
Mevinphos	60.3	10	ng/l	50.0	ND	121	25-189			



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04/20/2018 09:51

Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1385 - EPA 525.2M (Continued)										
Matrix Spike (W8C1385-MS1)										
Source: 8C22030-01 Prepared: 03/23/18 Analyzed: 03/30/18										
Naled	23.7	10	ng/l	50.0	ND	47	0.1-242			
Phorate	65.8	10	ng/l	50.0	ND	132	31-181			
Ronnel	60.7	10	ng/l	50.0	ND	121	29-153			
Stirophos	65.3	10	ng/l	50.0	ND	131	0.1-167			
Tokuthion (Prothifos)	47.9	10	ng/l	50.0	ND	96	27-160			
Trichloronate	56.0	10	ng/l	50.0	ND	112	40-150			
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene		467	ng/l	500		93	76-128			
<i>Triphenyl phosphate</i>		600	ng/l	500		120	40-163			
Matrix Spike (W8C1385-MS2)										
Source: 8C23035-01 Prepared: 03/23/18 Analyzed: 03/30/18										
Azinphos methyl (Guthion)	94.4	10	ng/l	50.0	ND	189	0.1-154			MS-05
Bolstar	72.8	10	ng/l	50.0	ND	146	4-184			
Chlorpyrifos	72.3	10	ng/l	50.0	ND	145	37-168			
Coumaphos	85.0	10	ng/l	50.0	ND	170	0.1-203			
Demeton-o	47.6	10	ng/l	50.0	ND	95	0.1-208			
Demeton-s	75.7	10	ng/l	50.0	ND	151	0.1-207			
Diazinon	70.3	10	ng/l	50.0	ND	141	36-153			
Dichlorvos	55.2	10	ng/l	50.0	ND	110	42-137			
Dimethoate	85.9	10	ng/l	50.0	ND	172	4-222			
Disulfoton	62.8	10	ng/l	50.0	ND	126	12-199			
Ethoprop	66.5	10	ng/l	50.0	ND	133	51-167			
Ethyl parathion	74.5	10	ng/l	50.0	ND	149	5-229			
Fensulfothion	63.5	10	ng/l	50.0	ND	127	0.1-316			
Fenthion	71.9	10	ng/l	50.0	ND	144	23-169			
Malathion	65.9	10	ng/l	50.0	ND	132	6-184			
Merphos	65.0	10	ng/l	50.0	ND	130	3-210			
Methyl parathion	76.6	10	ng/l	50.0	ND	153	0.1-249			
Mevinphos	68.3	10	ng/l	50.0	ND	137	25-189			
Naled	23.8	10	ng/l	50.0	ND	48	0.1-242			
Phorate	80.7	10	ng/l	50.0	ND	161	31-181			
Ronnel	72.2	10	ng/l	50.0	ND	144	29-153			
Stirophos	68.2	10	ng/l	50.0	ND	136	0.1-167			
Tokuthion (Prothifos)	78.4	10	ng/l	50.0	ND	157	27-160			
Trichloronate	65.2	10	ng/l	50.0	ND	130	40-150			
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene		463	ng/l	500		93	76-128			
<i>Triphenyl phosphate</i>		760	ng/l	500		152	40-163			



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04/20/2018 09:51

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Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1385 - EPA 525.2M (Continued)										
Matrix Spike Dup (W8C1385-MSD1)										
Source: 8C22030-01 Prepared: 03/23/18 Analyzed: 03/30/18										
Azinphos methyl (Guthion)	80.1	10	ng/l	50.0	ND	160	0.1-154	2	30	MS-05
Bolstar	45.2	10	ng/l	50.0	ND	90	4-184	4	30	
Chlorpyrifos	75.9	10	ng/l	50.0	ND	152	37-168	20	30	
Coumaphos	69.2	10	ng/l	50.0	ND	138	0.1-203	2	30	
Demeton-o	35.2	10	ng/l	50.0	ND	70	0.1-208	9	30	
Demeton-s	63.0	10	ng/l	50.0	ND	126	0.1-207	24	30	
Diazinon	61.1	10	ng/l	50.0	ND	122	36-153	10	30	
Dichlorvos	49.0	10	ng/l	50.0	ND	98	42-137	12	30	
Dimethoate	84.9	10	ng/l	50.0	ND	170	4-222	0.1	30	
Disulfoton	45.5	10	ng/l	50.0	ND	91	12-199	20	30	
Ethoprop	60.8	10	ng/l	50.0	ND	122	51-167	10	30	
Ethyl parathion	80.6	10	ng/l	50.0	ND	161	5-229	17	30	
Fensulfothion	51.0	10	ng/l	50.0	ND	102	0.1-316	8	30	
Fenthion	68.3	10	ng/l	50.0	ND	137	23-169	30	30	
Malathion	83.6	10	ng/l	50.0	12.7	142	6-184	23	30	
Morphos	37.9	10	ng/l	50.0	ND	76	3-210	8	30	
Methyl parathion	91.0	10	ng/l	50.0	ND	182	0.1-249	24	30	
Mevinphos	49.0	10	ng/l	50.0	ND	98	25-189	21	30	
Naled	25.2	10	ng/l	50.0	ND	50	0.1-242	6	30	
Phorate	75.1	10	ng/l	50.0	ND	150	31-181	13	30	
Ronnel	73.4	10	ng/l	50.0	ND	147	29-153	19	30	
Stirophos	104	10	ng/l	50.0	ND	208	0.1-167	46	30	MS-05
Tokuthion (Prothiosfos)	43.2	10	ng/l	50.0	ND	86	27-160	10	30	
Trichloronate	67.6	10	ng/l	50.0	ND	135	40-150	19	30	
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene	458	ng/l	500			92	76-128			
Triphenyl phosphate	777	ng/l	500			155	40-163			
Matrix Spike Dup (W8C1385-MSD2)										
Source: 8C23035-01 Prepared: 03/23/18 Analyzed: 03/30/18										
Azinphos methyl (Guthion)	87.6	10	ng/l	50.0	ND	175	0.1-154	8	30	MS-05
Bolstar	62.5	10	ng/l	50.0	ND	125	4-184	15	30	
Chlorpyrifos	71.9	10	ng/l	50.0	ND	144	37-168	0.6	30	
Coumaphos	75.5	10	ng/l	50.0	ND	151	0.1-203	12	30	
Demeton-o	57.3	10	ng/l	50.0	ND	115	0.1-208	19	30	
Demeton-s	77.9	10	ng/l	50.0	ND	156	0.1-207	3	30	
Diazinon	56.9	10	ng/l	50.0	ND	114	36-153	21	30	
Dichlorvos	51.9	10	ng/l	50.0	ND	104	42-137	6	30	
Dimethoate	85.4	10	ng/l	50.0	ND	171	4-222	0.6	30	



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Quality Control Results

(Continued)

Semivolatile Organics - Low Level by Tandem GC/MS/MS (Continued)

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: W8C1385 - EPA 525.2M (Continued)										
Matrix Spike Dup (W8C1385-MSD2)										
Disulfoton	62.9	10	ng/l	50.0	ND	126	12-199	0.08	30	
Ethoprop	61.8	10	ng/l	50.0	ND	124	51-167	7	30	
Ethyl parathion	81.6	10	ng/l	50.0	ND	163	5-229	9	30	
Fensulfothion	61.1	10	ng/l	50.0	ND	122	0.1-316	4	30	
Fenthion	75.9	10	ng/l	50.0	ND	152	23-169	5	30	
Malathion	68.5	10	ng/l	50.0	ND	137	6-184	4	30	
Merphos	51.7	10	ng/l	50.0	ND	103	3-210	23	30	
Methyl parathion	79.8	10	ng/l	50.0	ND	160	0.1-249	4	30	
Mevinphos	62.3	10	ng/l	50.0	ND	125	25-189	9	30	
Naled	22.3	10	ng/l	50.0	ND	45	0.1-242	6	30	
Phorate	80.1	10	ng/l	50.0	ND	160	31-181	0.7	30	
Ronnel	69.4	10	ng/l	50.0	ND	139	29-153	4	30	
Stirophos	80.0	10	ng/l	50.0	ND	160	0.1-167	16	30	
Tokuthion (Prothiosfos)	59.2	10	ng/l	50.0	ND	118	27-160	28	30	
Trichloronate	62.8	10	ng/l	50.0	ND	126	40-150	4	30	
<i>Surrogate(s)</i>										
1,3-Dimethyl-2-nitrobenzene		496	ng/l	500		99	76-128			
Triphenyl phosphate		759	ng/l	500		152	40-163			



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Notes and Definitions

Item	Definition
M-02	Due to the nature of matrix interferences, sample was diluted prior to preparation. The MDL and MRL were raised due to the dilution.
M-04	Due to the nature of matrix interferences, sample extract was diluted prior to analysis. The MDL and MRL were raised due to the dilution.
M-06	Due to the high concentration of analyte inherent in the sample, sample was diluted prior to preparation. The MDL and MRL were raised due to this dilution.
MS-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
MS-05	The spike recovery and/or RPD were outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QC-2	This QC sample was reanalyzed to complement samples that require re-analysis on different date. See analysis date.
R-03	The RPD is not applicable for result below the reporting limit (either ND or J value).
S-11	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
S-GC	Surrogate recovery outside of control limits due to a possible matrix effect. The data was accepted based on valid recovery of the remaining surrogate.
ND	NOT DETECTED at or above the Method Reporting Limit (MRL). If Method Detection Limit (MDL) is reported, then ND means not detected at or above the MDL.
Dil	Dilution
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
% Rec	Percent Recovery
Source	Sample that was matrix spiked or duplicated.
MDL	Method Detection Limit
MRL	The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. The MRL is also known as Limit of Quantitation (LOQ) and Detection Limit for Reporting (DLR)
MDA	Minimum Detectable Activity
NR	Not Reportable
TIC	Tentatively Identified Compound (TIC) using mass spectrometry. The reported concentration is relative concentration based on the nearest internal standard. If the library search produces no matches at, or above 85%, the compound is reported as unknown.

Any remaining sample(s) will be disposed of one month from the final report date unless other arrangements are made in advance.

An Absence of Total Coliform meets the drinking water standards as established by the California State Water Resources Control Board (SWRCB)

All results are expressed on wet weight basis unless otherwise specified.

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS 002.



April 18, 2018

Mr. Bryn Home
Pacific Ridgeline
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Dear Mr. Home:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* EPA-821-R-02-013. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:	Pacific Ridgeline
SAMPLE I.D.:	LAILG-NGA#19-9
DATE RECEIVED:	23 March -18
ABC LAB. NO.:	PRI0318.259

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL	NOEC =	100.00 %
	TUc =	1.00
	EC25 =	N/A
	EC50 =	N/A %

REPRODUCTION	NOEC =	100.00 %
	TUc =	1.00
	IC25 =	N/A
	IC50 =	N/A

Yours very truly,


Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 18 Apr-18 11:11 (p 1 of 1)
 Test Code: PRI0318.259 | 08-4102-5606

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	03-0127-9341	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	23 Mar-18 13:35	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	30 Mar-18 13:57	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	7d 0h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	11-1533-1665	Code:	PRI0318.259	Client:	Pacific Ridgeline, Inc.
Sample Date:	22 Mar-18 08:10	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report		
Sample Age:	29h (16.8 °C)	Station:	LAILG-NGA#19-9		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result	
18-8314-4555	7d Survival Rate	Fisher Exact Test		0.5000	100% passed 7d survival rate
15-4757-1811	Reproduction	Equal Variance t Two-Sample Test		0.1895	100% passed reproduction

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
18-8314-4555	7d Survival Rate	Control Resp	0.9	0.8	>>	Yes	Passes Criteria	
15-4757-1811	Reproduction	Control Resp	15.1	15	>>	Yes	Passes Criteria	

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	0.9000	0.6738	1.0000	0.0000	1.0000	0.1000	0.3162	35.14%	0.00%
100		10	0.8000	0.4984	1.0000	0.0000	1.0000	0.1333	0.4216	52.70%	11.11%

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	15.1	11.75	18.45	9	23	1.479	4.677	30.98%	0.00%
100		10	12.6	7.298	17.9	0	24	2.344	7.412	58.82%	16.56%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	0.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	10	20	13	17	17	18	9	23	14	10
100		24	5	19	10	7	0	15	15	11	20

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	0/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1

CETIS Analytical Report

Report Date: 18 Apr-18 11:11 (p 1 of 2)
 Test Code: PRI0318.259 | 08-4102-5606

Ceriodaphnia 7-d Survival and Reproduction Test				Aquatic Bioassay & Consulting Labs, Inc.	
Analysis ID:	15-4757-1811	Endpoint:	Reproduction		CETIS Version: CETISv1.9.2
Analyzed:	02 Apr-18 12:29	Analysis:	Parametric-Two Sample		Official Results: Yes
Batch ID:	03-0127-9341	Test Type:	Reproduction-Survival (7d)		Analyst:
Start Date:	23 Mar-18 13:35	Protocol:	EPA/821/R-02-013 (2002)		Diluent: Laboratory Water
Ending Date:	30 Mar-18 13:57	Species:	Ceriodaphnia dubia		Brine: Not Applicable
Duration:	7d 0h	Source:	Aquatic Biosystems, CO		Age:
Sample ID:	11-1533-1665	Code:	PRI0318.259		Client: Pacific Ridgeline, Inc.
Sample Date:	22 Mar-18 08:10	Material:	Sample Water		Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report		
Sample Age:	29h (16.8 °C)	Station:	LAILG-NGA#19-9		

Data Transform	Alt Hyp	Comparison Result				PMSD
Untransformed	C > T	100% passed reproduction				31.83%

Equal Variance t Two-Sample Test

Control	vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100	0.902	1.734	4.806	18	CDF	0.1895	Non-Significant Effect

Test Acceptability Criteria		TAC Limits			
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	15.1	15	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision($\alpha:5\%$)
Between	31.25	31.25	1	0.8137	0.3789	Non-Significant Effect
Error	691.3	38.4056	18			
Total	722.55		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision($\alpha:1\%$)
Variances	Levene Equality of Variance Test	2.215	8.285	0.1540	Equal Variances
Variances	Mod Levene Equality of Variance Test	2.176	8.285	0.1575	Equal Variances
Variances	Variance Ratio F Test	2.511	6.541	0.1864	Equal Variances
Distribution	Anderson-Darling A2 Normality Test	0.2223	3.878	0.8619	Normal Distribution
Distribution	D'Agostino Kurtosis Test	0.1817	2.576	0.8558	Normal Distribution
Distribution	D'Agostino Skewness Test	0.1737	2.576	0.8621	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	0.06317	9.21	0.9689	Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.1236	0.2235	0.6104	Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.9833	0.866	0.9695	Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	15.1	11.75	18.45	15.5	9	23	1.479	30.98%	0.00%
100		10	12.6	7.298	17.9	13	0	24	2.344	58.82%	16.56%

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	10	20	13	17	17	18	9	23	14	10
100		24	5	19	10	7	0	15	15	11	20

CETIS Analytical Report

Report Date: 18 Apr-18 11:11 (p 2 of 2)
Test Code: PRI0318.259 | 08-4102-5606

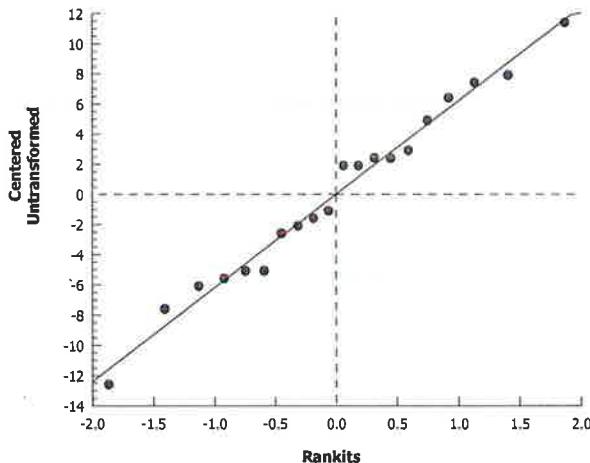
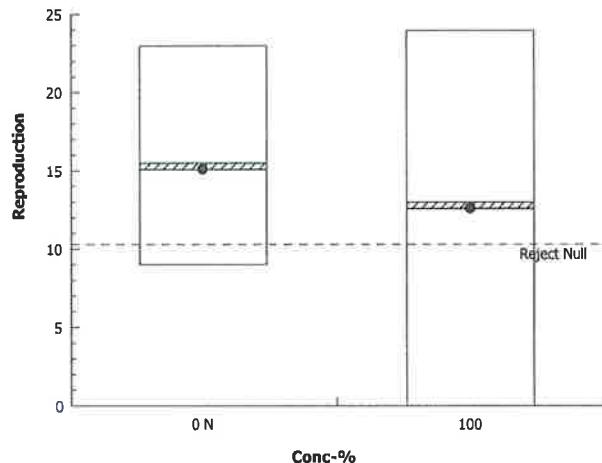
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 15-4757-1811 Endpoint: Reproduction
Analyzed: 02 Apr-18 12:29 Analysis: Parametric-Two Sample

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 18 Apr-18 11:11 (p 1 of 1)
 Test Code: PRI0318.259 | 08-4102-5606

Ceriodaphnia 7-d Survival and Reproduction Test					Aquatic Bioassay & Consulting Labs, Inc.						
Analysis ID:	18-8314-4555	Endpoint:	7d Survival Rate			CETIS Version:	CETISv1.9.2				
Analyzed:	02 Apr-18 12:29	Analysis:	Single 2x2 Contingency Table			Official Results:	Yes				
Batch ID:	03-0127-9341	Test Type:	Reproduction-Survival (7d)			Analyst:					
Start Date:	23 Mar-18 13:35	Protocol:	EPA/821/R-02-013 (2002)			Diluent:	Laboratory Water				
Ending Date:	30 Mar-18 13:57	Species:	Ceriodaphnia dubia			Brine:	Not Applicable				
Duration:	7d 0h	Source:	Aquatic Biosystems, CO			Age:					
Sample ID:	11-1533-1665	Code:	PRI0318.259			Client:	Pacific Ridgeline, Inc.				
Sample Date:	22 Mar-18 08:10	Material:	Sample Water			Project:	LA Irrigated Lands Group (LAILG)-NG				
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report								
Sample Age:	29h (16.8 °C)	Station:	LAILG-NGA#19-9								
Data Transform	Alt Hyp	Comparison Result									
Untransformed	C > T	100% passed 7d survival rate									
Fisher Exact Test											
Control	vs	Group	Test Stat	P-Type	P-Value	Decision($\alpha:5\%$)					
Negative Control		100	0.5000	Exact	0.5000	Non-Significant Effect					
Test Acceptability Criteria			TAC Limits								
Attribute	Test Stat	Lower	Upper	Overlap	Decision						
Control Resp	0.9	0.8	>>	Yes	Passes Criteria						
Data Summary											
Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect				
0	N	9	1	10	0.9	0.1	0.0%				
100		8	2	10	0.8	0.2	11.11%				
7d Survival Rate Detail											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	0.0000	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000
7d Survival Rate Binomials											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	0/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1
Graphics											
0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0		
0.0	0 N	100	100								
0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0		
0.0	0 N	100	100								

CETIS Measurement Report

 Report Date: 18 Apr-18 11:11 (p 1 of 2)
 Test Code: PRI0318.259 | 08-4102-5606

Ceriodaphnia 7-d Survival and Reproduction Test
Aquatic Bioassay & Consulting Labs, Inc.

Batch ID: 03-0127-9341	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 23 Mar-18 13:35	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 30 Mar-18 13:57	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 7d 0h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 11-1533-1665	Code: PRI0318.259	Client: Pacific Ridgeline, Inc.
Sample Date: 22 Mar-18 08:10	Material: Sample Water	Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date: 23 Mar-18 12:15	Source: Bioassay Report	
Sample Age: 29h (16.8 °C)	Station: LAILG-NGA#19-9	

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	61.75	60.88	62.62	61	63	0.366	1.035	1.68%	0
100		8	59	59	59	59	59	0	0	0.0%	0
Overall		16	60.38	59.53	61.22	59	63	0.3966	1.586	2.63%	0 (0%)

Conductivity-µhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	353.9	347.5	360.3	347	367	2.702	7.643	2.16%	0
100		8	1352	1341	1363	1321	1364	4.697	13.29	0.98%	0
Overall		16	853.1	578.3	1128	347	1364	128.9	515.7	60.45%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.625	7.358	7.892	7.3	8.2	0.113	0.3196	4.19%	0
100		8	7.125	6.192	8.058	5.1	8.2	0.3945	1.116	15.66%	0
Overall		16	7.375	6.931	7.819	5.1	8.2	0.2085	0.8339	11.31%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	94.88	92.71	97.04	93	98	0.9149	2.588	2.73%	0
100		8	409	409	409	409	409	0	0	0.0%	0
Overall		16	251.9	165.5	338.4	93	409	40.56	162.2	64.39%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.725	7.553	7.897	7.3	7.9	0.07258	0.2053	2.66%	0
100		8	6.95	6.824	7.076	6.7	7.1	0.05345	0.1512	2.18%	0
Overall		16	7.338	7.105	7.57	6.7	7.9	0.1091	0.4365	5.95%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
100		8	24	24	24	24	24	0	0	0.0%	0
Overall		16	24	24	24	24	24	0	0	0.00%	0 (0%)

CETIS Measurement ReportReport Date: 16 Apr-16 11:11 (p 2 of 2)
Test Code: PRI0318.259 | 08-4102-5606**Ceriodaphnia 7-d Survival and Reproduction Test****Aquatic Bioassay & Consulting Labs, Inc.****Alkalinity (CaCO₃)-mg/L**

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	63	63	63	61	61	61	61	61
100		59	59	59	59	59	59	59	59

Conductivity- μ mhos

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	352	347	348	353	347	353	364	367
100		1357	1358	1355	1349	1358	1364	1356	1321

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.3	7.7	7.8	7.8	7.6	7.3	7.3	8.2
100		8.2	8	7.7	7.6	7.3	7.4	5.7	5.1

Hardness (CaCO₃)-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	98	98	98	93	93	93	93	93
100		409	409	409	409	409	409	409	409

pH-Units

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.6	7.7	7.9	7.9	7.7	7.9	7.8	7.3
100		6.7	6.9	7.1	7.1	6.9	7	7.1	6.8

Temperature-°C

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
100		24	24	24	24	24	24	24	24



April 18, 2018

Mr. Bryn Home
Pacific Ridgeline
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Dear Mr. Home:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* EPA-821-R-02-013. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

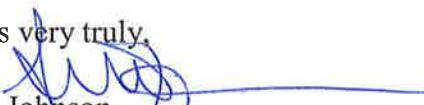
CLIENT: Pacific Ridgeline
SAMPLE I.D.: LAILG-NGA#4-9
DATE RECEIVED: 23 March -18
ABC LAB. NO.: PRI0318.260

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL NOEC = <100.00 %
 TUC = >1.00
 EC25 = N/A
 EC50 = N/A

REPRODUCTION NOEC = <100.00 %
 TUC = >1.00
 IC25 = N/A
 IC50 = N/A

Yours very truly,


Scott Johnson
Laboratory Director

CETIS Summary Report

 Report Date: 18 Apr-18 11:12 (p 1 of 1)
 Test Code: PRI0318.260 | 04-7010-9205

Periodaphnia 7-d Survival and Reproduction Test Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	05-0647-3966	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	23 Mar-18 13:38	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	30 Mar-18 13:59	Species:	Periodaphnia dubia	Brine:	Not Applicable
Duration:	7d 0h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	06-9129-8175	Code:	PRI0318.260	Client:	Pacific Ridgeline, Inc.
Sample Date:	22 Mar-18 11:00	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report		
Sample Age:	27h (17.4 °C)	Station:	LAILG-NGA#4-9		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result	
15-3941-9954	7d Survival Rate	Fisher Exact Test		6.0E-05	100% failed 7d survival rate
16-1227-9372	Reproduction	Unequal Variance t Two-Sample Test		1.5E-06	100% failed reproduction

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
15-3941-9954	7d Survival Rate	Control Resp	0.9	0.8	>>		Yes	Passes Criteria
16-1227-9372	Reproduction	Control Resp	15.1	15	>>		Yes	Passes Criteria

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	0.9000	0.6738	1.0000	0.0000	1.0000	0.1000	0.3162	35.14%	0.00%
100		10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		100.00%

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	15.1	11.75	18.45	9	23	1.479	4.677	30.98%	0.00%
100		10	0	0	0	0	0	0	0		100.00%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	10	20	13	17	17	18	9	23	14	10
100		0	0	0	0	0	0	0	0	0	0

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

CETIS Analytical Report

Report Date: 18 Apr-18 11:12 (p 1 of 2)
 Test Code: PRI0318.260 | 04-7010-9205

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	16-1227-9372	Endpoint:	Reproduction	CETIS Version:	CETISv1.9.2
Analyzed:	15 Apr-18 17:11	Analysis:	Parametric-Two Sample	Official Results:	Yes
Batch ID:	05-0647-3966	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	23 Mar-18 13:38	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	30 Mar-18 13:59	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	7d 0h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	06-9129-8175	Code:	PRI0318.260	Client:	Pacific Ridgeline, Inc.
Sample Date:	22 Mar-18 11:00	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report		
Sample Age:	27h (17.4 °C)	Station:	LAILG-NGA#4-9		

Data Transform	Alt Hyp	Comparison Result				PMSD
Untransformed	C > T	100% failed reproduction				17.96%

Unequal Variance t Two-Sample Test

Control	vs	Control II	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100*	10.21	1.833	2.711	9	CDF	1.5E-06	Significant Effect

Test Acceptability Criteria		TAC Limits			
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	15.1	15	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision($\alpha:5\%$)
Between	1140.05	1140.05	1	104.2	<1.0E-37	Significant Effect
Error	196.9	10.9389	18			
Total	1336.95		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision($\alpha:1\%$)
Variances	Levene Equality of Variance Test	30.56	8.285	3.0E-05	Unequal Variances
Variances	Mod Levene Equality of Variance Test	29.5	8.285	3.7E-05	Unequal Variances
Distribution	Anderson-Darling A2 Normality Test	1.389	3.878	7.7E-04	Non-Normal Distribution
Distribution	D'Agostino Kurtosis Test	1.376	2.576	0.1687	Normal Distribution
Distribution	D'Agostino Skewness Test	0.528	2.576	0.5975	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	2.173	9.21	0.3374	Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.25	0.2235	0.0020	Non-Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.8888	0.866	0.0256	Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	15.1	11.75	18.45	15.5	9	23	1.479	30.98%	0.00%
100		10	0	0	0	0	0	0	0		100.00%

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	10	20	13	17	17	18	9	23	14	10
100		0	0	0	0	0	0	0	0	0	0

CETIS Analytical Report

Report Date: 18 Apr-18 11:12 (p 2 of 2)
Test Code: PRI0318.260 | 04-7010-9205

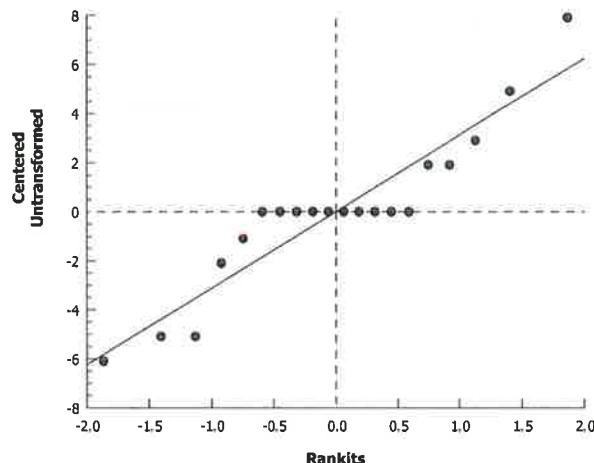
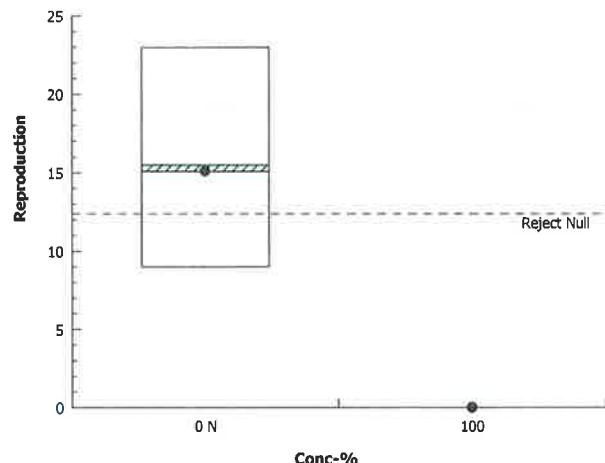
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 16-1227-9372 Endpoint: Reproduction
Analyzed: 15 Apr-18 17:11 Analysis: Parametric-Two Sample

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 18 Apr-18 11:12 (p 1 of 1)
 Test Code: PRI0318.260 | 04-7010-9205

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	15-3941-9954	Endpoint:	7d Survival Rate	CETIS Version:	CETISv1.9.2
Analyzed:	15 Apr-18 17:11	Analysis:	Single 2x2 Contingency Table	Official Results:	Yes
Batch ID:	05-0647-3966	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	23 Mar-18 13:38	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	30 Mar-18 13:59	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	7d 0h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	06-9129-8175	Code:	PRI0318.260	Client:	Pacific Ridgeline, Inc.
Sample Date:	22 Mar-18 11:00	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report		
Sample Age:	27h (17.4 °C)	Station:	LAILG-NGA#4-9		

Data Transform	Alt Hyp	Comparison Result
Untransformed	C > T	100% failed 7d survival rate

Fisher Exact Test

Control	vs	Control	Test Stat	P-Type	P-Value	Decision(α :5%)
Negative Control		100*	0.0001	Exact	6.0E-05	Significant Effect

Test Acceptability Criteria

Attribute	Test Stat	TAC Limits			
		Lower	Upper	Overlap	Decision
Control Resp	0.9	0.8	>>	Yes	Passes Criteria

Data Summary

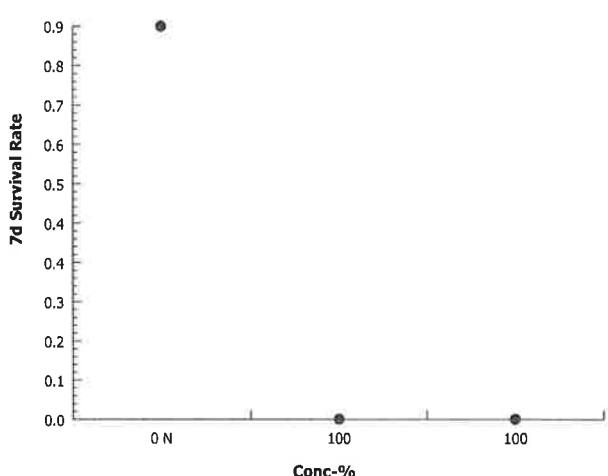
Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
0	N	9	1	10	0.9	0.1	0.0%
100		0	10	10	0	1	100.0%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

Graphics

CETIS Measurement Report

Report Date: 18 Apr-18 11:12 (p 1 of 2)
 Test Code: PRI0318.260 | 04-7010-9205

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID: 05-0647-3966	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 23 Mar-18 13:38	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 30 Mar-18 13:59	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 7d 0h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 06-9129-8175	Code: PRI0318.260	Client: Pacific Ridgeline, Inc.
Sample Date: 22 Mar-18 11:00	Material: Sample Water	Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date: 23 Mar-18 12:15	Source: Bioassay Report	
Sample Age: 27h (17.4 °C)	Station: LAILG-NGA#4-9	

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	61.75	60.88	62.62	61	63	0.366	1.035	1.68%	0
100		4	20	20	20	20	20	0	0	0.0%	0
Overall		12	47.83	34.76	60.9	20	63	5.939	20.57	43.01%	0 (0%)

Conductivity-µmhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	353.9	347.5	360.3	347	367	2.702	7.643	2.16%	0
100		4	66.75	63.47	70.03	65	69	1.031	2.062	3.09%	0
Overall		12	258.2	168.3	348.1	65	367	40.85	141.5	54.81%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.688	7.441	7.934	7.3	8.2	0.1043	0.2949	3.84%	0
100		4	7.525	7.068	7.982	7.1	7.7	0.1436	0.2872	3.82%	0
Overall		12	7.633	7.449	7.818	7.1	8.2	0.08379	0.2902	3.80%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	94.88	92.71	97.04	93	98	0.9149	2.588	2.73%	0
100		4	60	60	60	60	60	0	0	0.0%	0
Overall		12	83.25	72.26	94.24	60	98	4.993	17.29	20.77%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.725	7.553	7.897	7.3	7.9	0.07258	0.2053	2.66%	0
100		4	6.95	6.645	7.255	6.7	7.1	0.09574	0.1915	2.76%	0
Overall		12	7.467	7.195	7.738	6.7	7.9	0.1233	0.4271	5.72%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
100		4	24	24	24	24	24	0	0	0.0%	0
Overall		12	24	24	24	24	24	0	0	0.00%	0 (0%)

CETIS Measurement Report

Report Date:

18-Apr-18 11:12 (p 2 of 2)

Test Code:

PRI0318.260 | 04-7010-9205

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.****Alkalinity (CaCO₃)-mg/L**

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	63	63	63	61	61	61	61	61
100		20	20	20	20				

Conductivity- μ mhos

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	352	347	348	353	347	353	364	367
100		65	65	68	69				

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.3	7.7	7.8	7.8	7.6	7.3	7.8	8.2
100		7.6	7.7	7.7	7.1				

Hardness (CaCO₃)-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	98	98	98	93	93	93	93	93
100		60	60	60	60				

pH-Units

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.6	7.7	7.9	7.9	7.7	7.9	7.8	7.3
100		6.7	6.9	7.1	7.1				

Temperature-°C

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
100		24	24	24	24				



April 18, 2018

Mr. Bryn Home
Pacific Ridgeline
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Dear Mr. Home:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* EPA-821-R-02-013. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT:	Pacific Ridgeline
SAMPLE I.D.:	LAILG-NGA#64-5
DATE RECEIVED:	23 March -18
ABC LAB. NO.:	PRI0318.261

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL	NOEC =	100.00 %
	TUc =	1.00
	EC25 =	N/A
	EC50 =	N/A %
REPRODUCTION	NOEC =	100.00 %
	TUc =	1.00
	IC25 =	N/A
	IC50 =	N/A

Yours very truly,


Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 18 Apr-18 11:14 (p 1 of 1)
 Test Code: PRI0318.261 | 17-5083-2960

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	16-2131-7324	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	23 Mar-18 13:40	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	30 Mar-18 13:03	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 23h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	09-2773-3274	Code:	PRI0318.261	Client:	Pacific Ridgeline, Inc.
Sample Date:	22 Mar-18 11:45	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report		
Sample Age:	26h (17 °C)	Station:	LAILG-NGA#64-5		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result	
18-8122-3272	7d Survival Rate	Fisher Exact Test		0.1517	100% passed 7d survival rate
18-8947-7920	Reproduction	Equal Variance t Two-Sample Test		0.2623	100% passed reproduction

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
18-8122-3272	7d Survival Rate	Control Resp	0.9	0.8	>>	Yes	Passes Criteria	
18-8947-7920	Reproduction	Control Resp	15.1	15	>>	Yes	Passes Criteria	

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	0.9000	0.6738	1.0000	0.0000	1.0000	0.1000	0.3162	35.14%	0.00%
100		10	0.6000	0.2306	0.9694	0.0000	1.0000	0.1633	0.5164	86.07%	33.33%

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	15.1	11.75	18.45	9	23	1.479	4.677	30.98%	0.00%
100		10	13	6.487	19.51	0	35	2.879	9.104	70.03%	13.91%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		0.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.0000	1.0000	1.0000

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	10	20	13	17	17	18	9	23	14	10
100		0	15	35	13	8	12	8	8	15	16

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1
100		0/1	1/1	1/1	1/1	1/1	0/1	0/1	0/1	1/1	1/1

CETIS Analytical Report

Report Date: 18 Apr-18 11:14 (p 1 of 2)
 Test Code: PRI0318.261 | 17-5083-2960

Ceriodaphnia 7-d Survival and Reproduction Test				Aquatic Bioassay & Consulting Labs, Inc.	
Analysis ID:	18-8947-7920	Endpoint:	Reproduction		CETIS Version: CETISv1.9.2
Analyzed:	02 Apr-18 12:33	Analysis:	Parametric-Two Sample		Official Results: Yes
Batch ID:	16-2131-7324	Test Type:	Reproduction-Survival (7d)		Analyst:
Start Date:	23 Mar-18 13:40	Protocol:	EPA/821/R-02-013 (2002)		Diluent: Laboratory Water
Ending Date:	30 Mar-18 13:03	Species:	Ceriodaphnia dubia		Brine: Not Applicable
Duration:	6d 23h	Source:	Aquatic Biosystems, CO		Age:
Sample ID:	09-2773-3274	Code:	PRI0318.261		Client: Pacific Ridgeline, Inc.
Sample Date:	22 Mar-18 11:45	Material:	Sample Water		Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report		
Sample Age:	26h (17 °C)	Station:	LAILG-NGA#64-5		

Data Transform	Alt Hyp	Comparison Result				PMSD
Untransformed	C > T	100% passed reproduction				37.17%

Equal Variance t Two-Sample Test

Control	vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control		100	0.6488	1.734	5.613	18	CDF	0.2623	Non-Significant Effect

Test Acceptability Criteria**TAC Limits**

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	15.1	15	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision($\alpha:5\%$)
Between	22.05	22.05	1	0.4209	0.5247	Non-Significant Effect
Error	942.9	52.3833	18			
Total	964.95		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision($\alpha:1\%$)
Variances	Levene Equality of Variance Test	0.715	8.285	0.4089	Equal Variances
Variances	Mod Levene Equality of Variance Test	0.7086	8.285	0.4109	Equal Variances
Variances	Variance Ratio F Test	3.789	6.541	0.0601	Equal Variances
Distribution	Anderson-Darling A2 Normality Test	0.9309	3.878	0.0182	Normal Distribution
Distribution	D'Agostino Kurtosis Test	2.675	2.576	0.0075	Non-Normal Distribution
Distribution	D'Agostino Skewness Test	2.533	2.576	0.0113	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	13.57	9.21	0.0011	Non-Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.1851	0.2235	0.0709	Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.8748	0.866	0.0143	Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	15.1	11.75	18.45	15.5	9	23	1.479	30.98%	0.00%
100		10	13	6.487	19.51	12.5	0	35	2.879	70.03%	13.91%

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	10	20	13	17	17	18	9	23	14	10
100		0	15	35	13	8	12	8	8	15	16

CETIS Analytical Report

Report Date: 18 Apr-18 11:14 (p 2 of 2)
Test Code: PRI0318.261 | 17-5083-2960

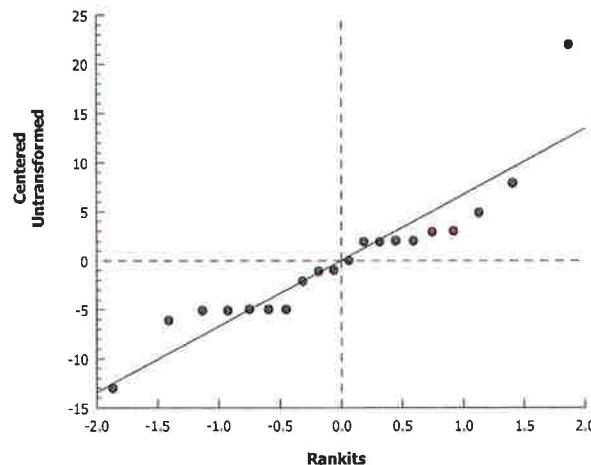
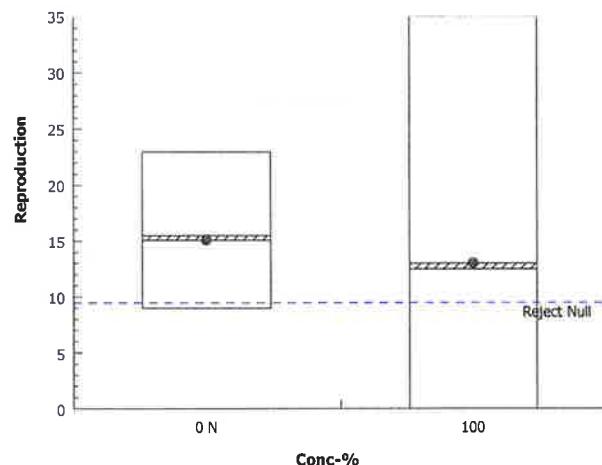
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 18-8947-7920 Endpoint: Reproduction
Analyzed: 02 Apr-18 12:33 Analysis: Parametric-Two Sample

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 18 Apr-18 11:14 (p 1 of 1)
 Test Code: PRI0318.261 | 17-5083-2960

Ceriodaphnia 7-d Survival and Reproduction Test					Aquatic Bioassay & Consulting Labs, Inc.						
Analysis ID: 18-8122-3272 Analyzed: 02 Apr-18 12:33	Endpoint: 7d Survival Rate Analysis: Single 2x2 Contingency Table				CETIS Version: CETISv1.9.2 Official Results: Yes						
Batch ID: 16-2131-7324 Start Date: 23 Mar-18 13:40 Ending Date: 30 Mar-18 13:03 Duration: 6d 23h	Test Type: Reproduction-Survival (7d) Protocol: EPA/821/R-02-013 (2002) Species: Ceriodaphnia dubia Source: Aquatic Biosystems, CO				Analyst: Diluent: Laboratory Water Brine: Not Applicable Age:						
Sample ID: 09-2773-3274 Sample Date: 22 Mar-18 11:45 Receipt Date: 23 Mar-18 12:15 Sample Age: 26h (17 °C)	Code: PRI0318.261 Material: Sample Water Source: Bioassay Report Station: LAILG-NGA#64-5				Client: Pacific Ridgeline, Inc. Project: LA Irrigated Lands Group (LAILG)-NG						
Data Transform	Alt Hyp	Comparison Result									
Untransformed	C > T	100% passed 7d survival rate									
Fisher Exact Test											
Control	vs	Group	Test Stat	P-Type	P-Value	Decision(α :5%)					
Negative Control		100	0.1517	Exact	0.1517	Non-Significant Effect					
Test Acceptability Criteria			TAC Limits								
Attribute	Test Stat	Lower	Upper	Overlap	Decision						
Control Resp	0.9	0.8	>>	Yes	Passes Criteria						
Data Summary											
Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect				
0	N	9	1	10	0.9	0.1	0.0%				
100		6	4	10	0.6	0.4	33.33%				
7d Survival Rate Detail											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		0.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.0000	1.0000	1.0000
7d Survival Rate Binomials											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1
100		0/1	1/1	1/1	1/1	1/1	0/1	0/1	0/1	1/1	1/1
Graphics											

CETIS Measurement Report

 Report Date: 18 Apr-18 11:14 (p 1 of 2)
 Test Code: PRI0318.261 | 17-5083-2960

Ceriodaphnia 7-d Survival and Reproduction Test
Aquatic Bioassay & Consulting Labs, Inc.

Batch ID: 16-2131-7324	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 23 Mar-18 13:40	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 30 Mar-18 13:03	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 6d 23h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 09-2773-3274	Code: PRI0318.261	Client: Pacific Ridgeline, Inc.
Sample Date: 22 Mar-18 11:45	Material: Sample Water	Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date: 23 Mar-18 12:15	Source: Bioassay Report	
Sample Age: 26h (17 °C)	Station: LAILG-NGA#64-5	

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	61.75	60.88	62.62	61	63	0.366	1.035	1.68%	0
100		8	24	24	24	24	24	0	0	0.0%	0
Overall		16	42.88	32.48	53.27	24	63	4.877	19.51	45.50%	0 (0%)

Conductivity-µhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	354	347.6	360.4	347	367	2.693	7.616	2.15%	0
100		8	101.8	82.87	120.6	81	138	7.984	22.58	22.19%	0
Overall		16	227.9	157.9	297.8	81	367	32.82	131.3	57.61%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.625	7.358	7.892	7.3	8.2	0.113	0.3196	4.19%	0
100		8	7.088	6.471	7.704	5.8	7.9	0.2608	0.7376	10.41%	0
Overall		16	7.356	7.028	7.684	5.8	8.2	0.1538	0.6153	8.37%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	94.88	92.71	97.04	93	98	0.9149	2.588	2.73%	0
100		8	46	46	46	46	46	0	0	0.0%	0
Overall		16	70.44	56.96	83.92	46	98	6.325	25.3	35.92%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.725	7.553	7.897	7.3	7.9	0.07258	0.2053	2.66%	0
100		8	6.9	6.659	7.141	6.5	7.3	0.1018	0.2878	4.17%	0
Overall		16	7.313	7.052	7.573	6.5	7.9	0.1224	0.4897	6.70%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
100		8	24	24	24	24	24	0	0	0.0%	0
Overall		16	24	24	24	24	24	0	0	0.00%	0 (0%)

CETIS Measurement Report

Report Date:

18 Apr-18 11:14 (p 2 of 2)

Test Code:

PRI0318.261 | 17-5083-2960

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.****Alkalinity (CaCO₃)-mg/L**

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	63	63	63	61	61	61	61	61
100		24	24	24	24	24	24	24	24

Conductivity- μ mhos

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	353	347	348	353	347	353	364	367
100		81	83	84	85	99	127	117	138

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.3	7.7	7.8	7.8	7.6	7.3	7.3	8.2
100		7.9	7.8	7.7	7	7.3	6.8	5.8	6.4

Hardness (CaCO₃)-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	98	98	98	93	93	93	93	93
100		46	46	46	46	46	46	46	46

pH-Units

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.6	7.7	7.9	7.9	7.7	7.9	7.8	7.3
100		6.5	6.5	6.9	6.8	7.1	7.3	7	7.1

Temperature-°C

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
100		24	24	24	24	24	24	24	24



April 18, 2018

Mr. Bryn Home
Pacific Ridgeline
1891 Goodyear Avenue, Suite 621
Ventura, CA 93003

Dear Mr. Home:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* EPA-821-R-02-013. "All acceptability criteria were met and the concentration-response was normal. This is a valid test." Results were as follows:

CLIENT: Pacific Ridgeline
SAMPLE I.D.: LAILG-NGA#168-9
DATE RECEIVED: 23 March -18
ABC LAB. NO.: PRI0318.262

CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY

SURVIVAL NOEC = 100.00 %
 TUC = 1.00
 EC25 = N/A
 EC50 = N/A %

REPRODUCTION NOEC = 100.00 %
 TUC = 1.00
 IC25 = N/A
 IC50 = N/A

Yours very truly,

Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 18 Apr-18 11:14 (p 1 of 1)
 Test Code: PRI0318.262 | 11-1160-7931

Ceriodaphnia 7-d Survival and Reproduction Test Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	16-8432-6142	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	23 Mar-18 13:41	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	30 Mar-18 12:10	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 22h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	15-1522-8166	Code:	PRI0318.262	Client:	Pacific Ridgeline, Inc.
Sample Date:	22 Mar-18 13:00	Material:	Sample Water	Project:	LA Irrigated Lands Group (LAILG)-NG
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report		
Sample Age:	25h (16.7 °C)	Station:	LAILG-NGA#168-9		

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
07-4195-7256	7d Survival Rate	Fisher Exact Test	1.0000	100% passed 7d survival rate
04-9928-4214	Reproduction	Equal Variance t Two-Sample Test	1.0000	100% passed reproduction

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
07-4195-7256	7d Survival Rate	Control Resp	0.9	0.8	>>	Yes	Passes Criteria	
04-9928-4214	Reproduction	Control Resp	15.1	15	>>	Yes	Passes Criteria	

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	0.9000	0.6738	1.0000	0.0000	1.0000	0.1000	0.3162	35.14%	0.00%
100		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	-11.11%

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	15.1	11.75	18.45	9	23	1.479	4.677	30.98%	0.00%
100		10	34.2	30.6	37.8	28	44	1.59	5.029	14.70%	-126.49%

7d Survival Rate Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Reproduction Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	10	20	13	17	17	18	9	23	14	10
100		40	33	32	37	36	32	31	44	29	28

7d Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

CETIS Analytical Report

Report Date: 18 Apr-18 11:14 (p 1 of 2)
 Test Code: PRI0318.262 | 11-1160-7931

Ceriodaphnia 7-d Survival and Reproduction Test							Aquatic Bioassay & Consulting Labs, Inc.						
Analysis ID:	04-9928-4214	Endpoint:	Reproduction				CETIS Version:	CETISv1.9.2					
Analyzed:	15 Apr-18 17:20	Analysis:	Parametric-Two Sample				Official Results:	Yes					
Batch ID:	16-8432-6142	Test Type:	Reproduction-Survival (7d)				Analyst:						
Start Date:	23 Mar-18 13:41	Protocol:	EPA/821/R-02-013 (2002)				Diluent:	Laboratory Water					
Ending Date:	30 Mar-18 12:10	Species:	Ceriodaphnia dubia				Brine:	Not Applicable					
Duration:	6d 22h	Source:	Aquatic Biosystems, CO				Age:						
Sample ID:	15-1522-8166	Code:	PRI0318.262				Client:	Pacific Ridgeline, Inc.					
Sample Date:	22 Mar-18 13:00	Material:	Sample Water				Project:	LA Irrigated Lands Group (LAILG)-NG					
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report				Station:	LAILG-NGA#168-9					
Data Transform	Alt Hyp	Comparison Result							PMSD				
Untransformed	C > T	100% passed reproduction							24.94%				
Equal Variance t Two-Sample Test													
Control	vs	Conc-%	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision($\alpha:5\%$)				
Negative Control		100	-8.795	1.734	3.766	18	CDF	1.0000	Non-Significant Effect				
Test Acceptability Criteria													
TAC Limits													
Attribute	Test Stat	Lower	Upper	Overlap	Decision								
Control Resp	15.1	15	>>	Yes	Passes Criteria								
ANOVA Table													
Source	Sum Squares	Mean Square		DF	F Stat	P-Value	Decision($\alpha:5\%$)						
Between	1824.05	1824.05		1	77.34	<1.0E-37	Significant Effect						
Error	424.5	23.5833		18									
Total	2248.55			19									
Distributional Tests													
Attribute	Test	Test Stat		Critical	P-Value	Decision($\alpha:1\%$)							
Variances	Levene Equality of Variance Test	0.01616		8.285	0.9003	Equal Variances							
Variances	Mod Levene Equality of Variance Test	0.005678		8.285	0.9408	Equal Variances							
Variances	Variance Ratio F Test	1.156		6.541	0.8326	Equal Variances							
Distribution	Anderson-Darling A2 Normality Test	0.4433		3.878	0.2909	Normal Distribution							
Distribution	D'Agostino Kurtosis Test	0.5891		2.576	0.5558	Normal Distribution							
Distribution	D'Agostino Skewness Test	0.9868		2.576	0.3238	Normal Distribution							
Distribution	D'Agostino-Pearson K2 Omnibus Test	1.321		9.21	0.5167	Normal Distribution							
Distribution	Kolmogorov-Smirnov D Test	0.142		0.2235	0.3638	Normal Distribution							
Distribution	Shapiro-Wilk W Normality Test	0.9422		0.866	0.2637	Normal Distribution							
Reproduction Summary													
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect		
0	N	10	15.1	11.75	18.45	15.5	9	23	1.479	30.98%	0.00%		
100		10	34.2	30.6	37.8	32.5	28	44	1.59	14.70%	-126.49%		
Reproduction Detail													
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10		
0	N	10	20	13	17	17	18	9	23	14	10		
100		40	33	32	37	36	32	31	44	29	28		

CETIS Analytical Report

Report Date: 18 Apr-18 11:14 (p 2 of 2)
Test Code: PRI0318.262 | 11-1160-7931

Ceriodaphnia 7-d Survival and Reproduction Test

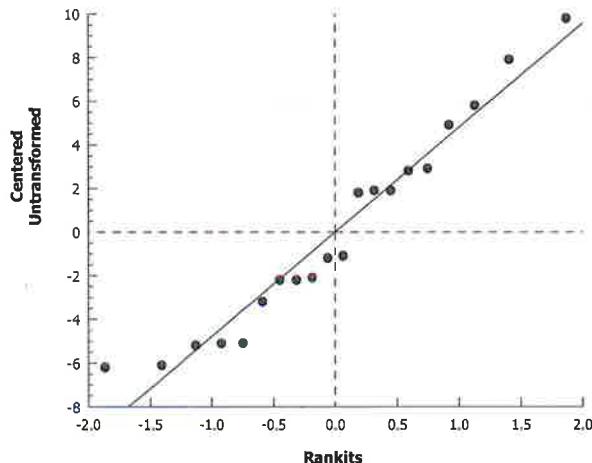
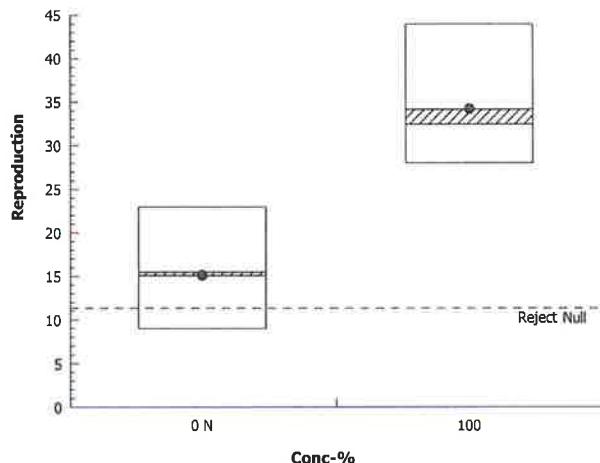
Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 04-9928-4214
Analyzed: 15 Apr-18 17:20

Endpoint: Reproduction
Analysis: Parametric-Two Sample

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 18 Apr-18 11:14 (p 1 of 1)
 Test Code: PRI0318.262 | 11-1160-7931

Ceriodaphnia 7-d Survival and Reproduction Test					Aquatic Bioassay & Consulting Labs, Inc.						
Analysis ID:	07-4195-7256	Endpoint:	7d Survival Rate			CETIS Version:	CETISv1.9.2				
Analyzed:	15 Apr-18 17:19	Analysis:	Single 2x2 Contingency Table			Official Results:	Yes				
Batch ID:	16-8432-6142	Test Type:	Reproduction-Survival (7d)			Analyst:					
Start Date:	23 Mar-18 13:41	Protocol:	EPA/821/R-02-013 (2002)			Diluent:	Laboratory Water				
Ending Date:	30 Mar-18 12:10	Species:	Ceriodaphnia dubia			Brine:	Not Applicable				
Duration:	6d 22h	Source:	Aquatic Biosystems, CO			Age:					
Sample ID:	15-1522-8166	Code:	PRI0318.262			Client:	Pacific Ridgeline, Inc.				
Sample Date:	22 Mar-18 13:00	Material:	Sample Water			Project:	LA Irrigated Lands Group (LAILG)-NG				
Receipt Date:	23 Mar-18 12:15	Source:	Bioassay Report								
Sample Age:	25h (16.7 °C)	Station:	LAILG-NGA#168-9								
Data Transform	Alt Hyp	Comparison Result									
Untransformed	C > T	100% passed 7d survival rate									
Fisher Exact Test											
Control	vs	Group	Test Stat	P-Type	P-Value	Decision($\alpha:5\%$)					
Negative Control		100	1.0000	Exact	1.0000	Non-Significant Effect					
Test Acceptability Criteria											
TAC Limits											
Attribute	Test Stat	Lower	Upper	Overlap	Decision						
Control Resp	0.9	0.8	>>	Yes	Passes Criteria						
Data Summary											
Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect				
0	N	9	1	10	0.9	0.1	0.0%				
100		10	0	10	1	0	-11.11%				
7d Survival Rate Detail											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	0.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7d Survival Rate Binomials											
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
100		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Graphics											
7d Survival Rate											
1.0											
0.9											
0.8											
0.7											
0.6											
0.5											
0.4											
0.3											
0.2											
0.1											
0.0											
0 N											
100											
100											

CETIS Measurement Report

Report Date: 18 Apr-18 11:14 (p 1 of 2)
 Test Code: PRI0318.262 | 11-1160-7931

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID: 16-8432-6142	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 23 Mar-18 13:41	Protocol: EPA/821/R-02-013 (2002)	Diluent: Laboratory Water
Ending Date: 30 Mar-18 12:10	Species: Ceriodaphnia dubia	Brine: Not Applicable
Duration: 6d 22h	Source: Aquatic Biosystems, CO	Age:
Sample ID: 15-1522-8166	Code: PRI0318.262	Client: Pacific Ridgeline, Inc.
Sample Date: 22 Mar-18 13:00	Material: Sample Water	Project: LA Irrigated Lands Group (LAILG)-NG
Receipt Date: 23 Mar-18 12:15	Source: Bioassay Report	
Sample Age: 25h (16.7 °C)	Station: LAILG-NGA#168-9	

Alkalinity (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	61.75	60.88	62.62	61	63	0.366	1.035	1.68%	0
100		8	44	44	44	44	44	0	0	0.0%	0
Overall		16	52.88	47.98	57.77	44	63	2.298	9.193	17.39%	0 (0%)

Conductivity-µhos

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	353.9	347.5	360.3	347	367	2.702	7.643	2.16%	0
100		8	686.4	675.2	697.6	669	699	4.736	13.39	1.95%	0
Overall		16	520.1	428.5	611.8	347	699	43.01	172	33.07%	0 (0%)

Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.625	7.358	7.892	7.3	8.2	0.113	0.3196	4.19%	0
100		8	7.113	6.422	7.803	5.9	8.5	0.2918	0.8254	11.6%	0
Overall		16	7.369	7.017	7.72	5.9	8.5	0.165	0.66	8.96%	0 (0%)

Hardness (CaCO3)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	94.88	92.71	97.04	93	98	0.9149	2.588	2.73%	0
100		8	170	170	170	170	170	0	0	0.0%	0
Overall		16	132.4	111.7	153.1	93	170	9.709	38.83	29.32%	0 (0%)

pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.725	7.553	7.897	7.3	7.9	0.07258	0.2053	2.66%	0
100		8	6.925	6.838	7.012	6.8	7.1	0.0366	0.1035	1.5%	0
Overall		16	7.325	7.089	7.561	6.8	7.9	0.1105	0.442	6.03%	0 (0%)

Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
100		8	24	24	24	24	24	0	0	0.0%	0
Overall		16	24	24	24	24	24	0	0	0.00%	0 (0%)

CETIS Measurement Report

Report Date:

18 Apr-18 11:14 (p 2 of 2)

Test Code:

PRI0318.262 | 11-1160-7931

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.****Alkalinity (CaCO₃)-mg/L**

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	63	63	63	61	61	61	61	61
100		44	44	44	44	44	44	44	44

Conductivity- μ mhos

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	352	347	348	353	347	353	364	367
100		699	698	699	698	681	675	672	669

Dissolved Oxygen-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.3	7.7	7.8	7.8	7.6	7.3	7.3	8.2
100		8.5	7.7	7.3	7.3	7.3	6.6	5.9	6.3

Hardness (CaCO₃)-mg/L

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	98	98	98	93	93	93	93	93
100		170	170	170	170	170	170	170	170

pH-Units

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	7.6	7.7	7.9	7.9	7.7	7.9	7.8	7.3
100		6.8	6.9	7	7.1	6.9	6.8	6.9	7

Temperature-°C

Conc-%	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
100		24	24	24	24	24	24	24	24



1891 Goodyear Ave., Suite 621
Ventura, CA 93003

Tel 855-682-1802 • www.pacrl.com

CHAIN OF CUSTODY RECORD

CLIENT NAME / BILL TO:
Pacific Ridgeline

ADDRESS:
1891 Goodyear Ave., Suite 621

PHONE: (855) 682-1802 Ext. 101
EMAIL: brynn@pacrl.com

PROJECT:
LA Irrigated Lands Group (LAILG) - NGA

ADDRESS:
PO#:

SAMPLER:
Scott Jordan

PROJECT MANAGER:
Brynn Home

Page 1 Of 1

STANDARD

24 Hour Rush

48-72 Hour Rush

4-5 Day Rush

EDF

ANALYSES REQUESTED

SPECIAL HANDLING

Ceriodaphnia Dubia (7Day)	<input checked="" type="checkbox"/>
Fathead Minnow (7 Day)	<input checked="" type="checkbox"/>
Selenastrum (36 hr.)	<input checked="" type="checkbox"/>

COMMENTS:

ID#	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE DESCRIPTION/SITE LOCATION	# OF CONT.
LAILG-NGA#49-9	3/22/18	8:10	RW	Site Discharge	2
LAILG-NGA#4-9		11:00			X
LAILG-NGA#64-5		11:45			X
LAILG-NGA#168-9		13:00			X

$$\text{Temp, deg. C} = 16.8 \approx 17.0 \approx 16.9$$

$$\text{Chlorine (mg/L)} = 4.1 \approx 4.0 \approx 4.0 \approx 4.0$$

$$\text{NO}_3 (\text{mg/L}) = 20 \approx 20.1 \approx 20.1 \approx 20.1$$

RELINQUISHED BY:

DATE / TIME:

3/22/18 @ 11:45

RECEIVED BY:

SAMPLE CONDITION:

Actual Temperature:

AQ=Aqueous
NA=Non Aqueous
SL=Sludge

RELINQUISHED BY:

DATE / TIME:

RECEIVED BY:

Received On Ice
Preserved
Evidence Seals Present
Container Attacked
Preserved at Lab

Y / N
Y / N
Y / N
Y / N
Y / N

DW = Drinking Water
WW = Waste Water
RW = Rain Water
GW = Ground Water

SO = Soil
SW = Solid Waste
OL = Oil

OT = Other Matrix

RELINQUISHED BY:

DATE / TIME:

RECEIVED BY:

RELINQUISHED BY:	DATE / TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE / TIME:	RECEIVED BY:



CHRONIC CERIODAPHNIA SURVIVAL AND REPRODUCTION BIOASSAY

DATE: 21 March - 2018

STANDARD TOXICANT: Copper Chloride

ENDPOINT: SURVIVAL

NOEC = 10.00 ug/l

EC25 = 15.56 ug/l

EC50 = 21.11 ug/l

ENDPOINT: REPRODUCTION

NOEC = 10.00 ug/l

IC25 = 11.98 ug/l

IC50 = 18.04 ug/l

Yours very truly,

Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 28 Mar-18 15:31 (p 1 of 2)
 Test Code: CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	11-5860-2909	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	21 Mar-18 15:00	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	28 Mar-18 13:45	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 23h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	11-4178-5915	Code:	CER032118	Client:	ABC Labs
Sample Date:	21 Mar-18 15:00	Material:	Copper chloride	Project:	REF TOX
Receipt Date:		Source:	Reference Toxicant		
Sample Age:	n/a	Station:	REF TOX		

Multiple Comparison Summary

Analysis ID	Endpoint	Comparison Method	NOEL	LOEL	TOEL	TU	PMSD	✓
06-7306-6317	7d Survival Rate	Fisher Exact/Bonferroni-Holm Test	10	30	17.32		n/a	✓
00-8400-3772	Reproduction	Steel Many-One Rank Sum Test	10	30	17.32		20.4%	✓

Point Estimate Summary

Analysis ID	Endpoint	Point Estimate Method	Level	µg/L	95% LCL	95% UCL	TU	✓
06-4202-1857	7d Survival Rate	Linear Interpolation (ICPIN)	EC5	11.11	11	11.43		
			EC10	12.22	12	12.86		
			EC15	13.33	13	14.29		
			EC20	14.44	14	15.71		
			EC25	15.56	15	17.14		
			EC40	18.89	18	21.43		
			EC50	21.11	20	24.29		
01-3746-7179	Reproduction	Linear Interpolation (ICPIN)	IC5	5.593	0.9208	10.41		✓
			IC10	7.453	1.842	11.45		✓
			IC15	9.313	2.762	12.49		✓
			IC20	10.77	6.667	13.53		✓
			IC25	11.98	8.382	14.56		✓
			IC40	15.62	11.83	17.69		✓
			IC50	18.04	14.92	19.76		✓

Test Acceptability

Analysis ID	Endpoint	Attribute	TAC Limits				Overlap	Decision
			Test Stat	Lower	Upper			
06-4202-1857	7d Survival Rate	Control Resp	1	0.8	>>	Yes		Passes Criteria
06-7306-6317	7d Survival Rate	Control Resp	1	0.8	>>	Yes		Passes Criteria
00-8400-3772	Reproduction	Control Resp	27.9	15	>>	Yes		Passes Criteria
01-3746-7179	Reproduction	Control Resp	27.9	15	>>	Yes		Passes Criteria
00-8400-3772	Reproduction	PMSD	0.2037	0.13	0.47	Yes		Passes Criteria

7d Survival Rate Summary

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
3		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
5		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
10		10	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
30		10	0.1000	0.0000	0.3262	0.0000	1.0000	0.1000	0.3162	316.23%	90.00%
50		10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		100.00%

Reproduction Summary

Conc-µg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	27.9	24.18	31.62	19	38	1.643	5.195	18.62%	0.00%
3		10	25	20.38	29.62	16	36	2.044	6.464	25.85%	10.39%
5		10	28.9	24.19	33.61	20	40	2.084	6.59	22.80%	-3.58%
10		10	23.2	18.1	28.3	13	37	2.255	7.131	30.74%	16.85%
30		10	0.2	-0.2524	0.6524	0	2	0.2	0.6325	316.23%	99.28%
50		10	0	0	0	0	0	0	0		100.00%

CETIS Summary Report

Report Date:

28 Mar-18 15:31 (p 2 of 2)

Test Code:

CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.****7d Survival Rate Detail**

Conc- μ g/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30		1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Reproduction Detail

Conc- μ g/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	23	38	25	31	27	32	29	27	19
3		17	31	29	36	25	25	16	25	18	28
5		40	34	25	21	33	36	26	28	26	20
10		22	32	37	24	13	16	25	19	24	20
30		2	0	0	0	0	0	0	0	0	0
50		0	0	0	0	0	0	0	0	0	0

7d Survival Rate Binomials

Conc- μ g/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
3		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
10		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
30		1/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
50		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

CETIS Analytical Report

Report Date: 28 Mar-18 15:31 (p 1 of 2)
 Test Code: CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	00-8400-3772	Endpoint:	Reproduction	CETIS Version:	CETISv1.9.2
Analyzed:	28 Mar-18 15:30	Analysis:	Nonparametric-Control vs Treatments	Official Results:	Yes
Batch ID:	11-5860-2909	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	21 Mar-18 15:00	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	28 Mar-18 13:45	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 23h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	11-4178-5915	Code:	CER032118	Client:	ABC Labs
Sample Date:	21 Mar-18 15:00	Material:	Copper chloride	Project:	REF TOX
Receipt Date:		Source:	Reference Toxicant		
Sample Age:	n/a	Station:	REF TOX		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU	PMSD
Untransformed	C > T	10	30	17.32		20.37%

Steel Many-One Rank Sum Test

Control	vs	Conc- μ g/L	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision($\alpha:5\%$)
Negative Control	3	91	76	4	18	Asymp	0.3481	Non-Significant Effect	
	5	108	76	2	18	Asymp	0.8662	Non-Significant Effect	
	10	81.5	76	3	18	Asymp	0.1129	Non-Significant Effect	
	30*	55	76	0	18	Asymp	3.1E-04	Significant Effect	

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	27.9	15	>>	Yes	Passes Criteria
PMSD	0.2037	0.13	0.47	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision($\alpha:5\%$)
Between	5634.92	1408.73	4	43.1	<1.0E-37	Significant Effect
Error	1471	32.6889	45			
Total	7105.92		49			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision($\alpha:1\%$)
Variances	Bartlett Equality of Variance Test	31.23	13.28	2.8E-06	Unequal Variances
Variances	Levene Equality of Variance Test	3.717	3.767	0.0107	Equal Variances
Variances	Mod Levene Equality of Variance Test	3.462	3.767	0.0150	Equal Variances
Distribution	Anderson-Darling A2 Normality Test	0.9889	3.878	0.0132	Normal Distribution
Distribution	D'Agostino Kurtosis Test	0.5203	2.576	0.6029	Normal Distribution
Distribution	D'Agostino Skewness Test	1.083	2.576	0.2789	Normal Distribution
Distribution	D'Agostino-Pearson K2 Omnibus Test	1.443	9.21	0.4860	Normal Distribution
Distribution	Kolmogorov-Smirnov D Test	0.1327	0.1453	0.0278	Normal Distribution
Distribution	Shapiro-Wilk W Normality Test	0.9557	0.9367	0.0589	Normal Distribution

Reproduction Summary

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	10	27.9	24.18	31.62	27.5	19	38	1.643	18.62%	0.00%
3		10	25	20.38	29.62	25	16	36	2.044	25.85%	10.39%
5		10	28.9	24.19	33.61	27	20	40	2.084	22.80%	-3.58%
10		10	23.2	18.1	28.3	23	13	37	2.255	30.74%	16.85%
30		10	0.2	-0.2524	0.6524	0	0	2	0.2	316.23%	99.28%
50		10	0	0	0	0	0	0	0		100.00%

CETIS Analytical ReportReport Date: 28 Mar-18 15:31 (p 2 of 2)
Test Code: CER032118 | 04-8459-8953**Ceriodaphnia 7-d Survival and Reproduction Test****Aquatic Bioassay & Consulting Labs, Inc.**Analysis ID: 00-8400-3772
Analyzed: 28 Mar-18 15:30

Endpoint: Reproduction

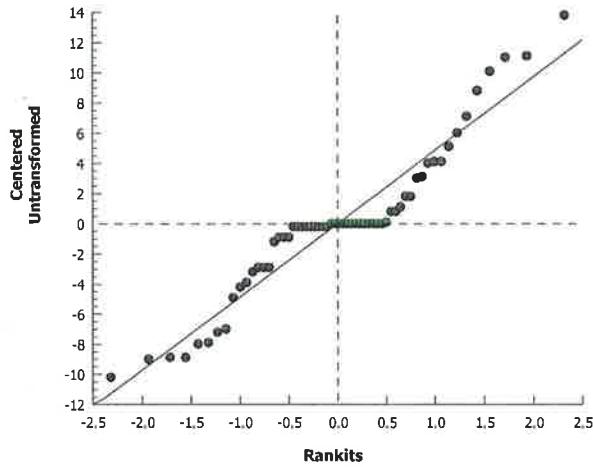
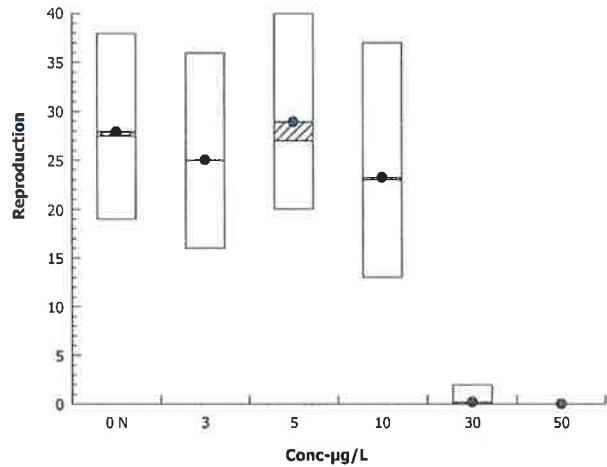
Analysis: Nonparametric-Control vs Treatments

CETIS Version: CETISv1.9.2

Official Results: Yes

Reproduction Detail

Conc- $\mu\text{g/L}$	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	23	38	25	31	27	32	29	27	19
3		17	31	29	36	25	25	16	25	18	28
5		40	34	25	21	33	36	26	28	26	20
10		22	32	37	24	13	16	25	19	24	20
30		2	0	0	0	0	0	0	0	0	0
50		0	0	0	0	0	0	0	0	0	0

Graphics

CETIS Analytical Report

Report Date: 28 Mar-18 15:31 (p 1 of 4)
 Test Code: CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	06-4202-1857	Endpoint:	7d Survival Rate	CETIS Version:	CETISv1.9.2
Analyzed:	28 Mar-18 15:30	Analysis:	Linear Interpolation (ICPIN)	Official Results:	Yes
Batch ID:	11-5860-2909	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	21 Mar-18 15:00	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	28 Mar-18 13:45	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 23h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	11-4178-5915	Code:	CER032118	Client:	ABC Labs
Sample Date:	21 Mar-18 15:00	Material:	Copper chloride	Project:	REF TOX
Receipt Date:		Source:	Reference Toxicant		
Sample Age:	n/a	Station:	REF TOX		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

Test Acceptability Criteria

Attribute	Test Stat	TAC Limits				Decision
		Lower	Upper	Overlap		
Control Resp	1	0.8	>>	Yes	Passes Criteria	

Point Estimates

Level	µg/L	95% LCL	95% UCL
EC5	11.11	11	11.43
EC10	12.22	12	12.86
EC15	13.33	13	14.29
EC20	14.44	14	15.71
EC25	15.56	15	17.14
EC40	18.89	18	21.43
EC50	21.11	20	24.29

7d Survival Rate Summary

Conc-µg/L	Code	Count	Calculated Variate(A/B)								
			Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	A	B
0	N	10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
3		10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
5		10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
10		10	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.0%	10	10
30		10	0.1000	0.0000	1.0000	0.1000	0.3162	316.20%	90.0%	1	10
50		10	0.0000	0.0000	0.0000	0.0000	0.0000		100.0%	0	10

7d Survival Rate Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30		1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7d Survival Rate Binomials

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
3		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
10		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
30		1/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
50		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1



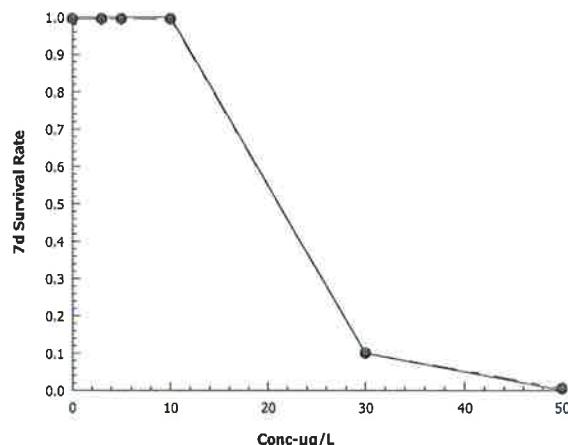
CETIS Analytical Report

Report Date: 28 Mar-18 15:31 (p 2 of 4)
Test Code: CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test**Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID: 06-4202-1857 Endpoint: 7d Survival Rate
Analyzed: 28 Mar-18 15:30 Analysis: Linear Interpolation (ICPIN)

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics

CETIS Analytical Report

Report Date: 28 Mar-18 15:31 (p 3 of 4)
 Test Code: CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	01-3746-7179	Endpoint:	Reproduction	CETIS Version:	CETISv1.9.2
Analyzed:	28 Mar-18 15:30	Analysis:	Linear Interpolation (ICPIN)	Official Results:	Yes
Batch ID:	11-5860-2909	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	21 Mar-18 15:00	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	28 Mar-18 13:45	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 23h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	11-4178-5915	Code:	CER032118	Client:	ABC Labs
Sample Date:	21 Mar-18 15:00	Material:	Copper chloride	Project:	REF TOX
Receipt Date:		Source:	Reference Toxicant		
Sample Age:	n/a	Station:	REF TOX		

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

Test Acceptability Criteria

TAC Limits					
Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	27.9	15	>>	Yes	Passes Criteria

Point Estimates

Level	µg/L	95% LCL	95% UCL
IC5	5.593	0.9208	10.41
IC10	7.453	1.842	11.45
IC15	9.313	2.762	12.49
IC20	10.77	6.667	13.53
IC25	11.98	8.382	14.56
IC40	15.62	11.83	17.69
IC50	18.04	14.92	19.76

Reproduction Summary

Calculated Variate									
Conc-µg/L	Code	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	10	27.9	19	38	1.643	5.195	18.62%	0.0%
3		10	25	16	36	2.044	6.464	25.85%	10.39%
5		10	28.9	20	40	2.084	6.59	22.80%	-3.58%
10		10	23.2	13	37	2.255	7.131	30.74%	16.85%
30		10	0.2	0	2	0.2	0.6325	316.20%	99.28%
50		10	0	0	0	0	0		100.0%

Reproduction Detail

Conc-µg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	28	23	38	25	31	27	32	29	27	19
3		17	31	29	36	25	25	16	25	18	28
5		40	34	25	21	33	36	26	28	26	20
10		22	32	37	24	13	16	25	19	24	20
30		2	0	0	0	0	0	0	0	0	0
50		0	0	0	0	0	0	0	0	0	0



CETIS Analytical Report

Report Date: 28 Mar-18 15:31 (p 4 of 4)
Test Code: CER032118 | 04-8459-8953

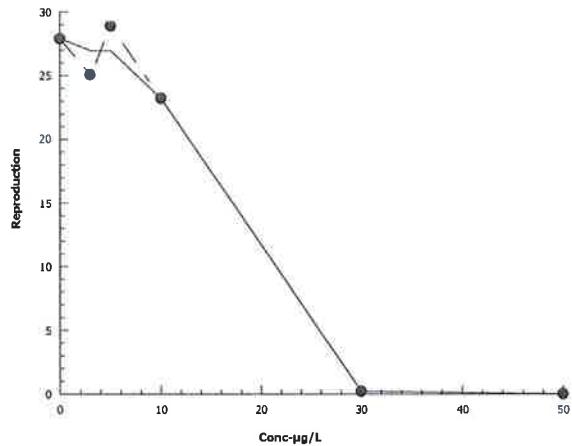
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 01-3746-7179 Endpoint: Reproduction
Analyzed: 28 Mar-18 15:30 Analysis: Linear Interpolation (ICPIN)

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Analytical Report

Report Date: 28 Mar-18 15:31 (p 1 of 2)
 Test Code: CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID:	06-7306-6317	Endpoint:	7d Survival Rate	CETIS Version:	CETISv1.9.2
Analyzed:	28 Mar-18 15:30	Analysis:	STP 2xK Contingency Tables	Official Results:	Yes
Batch ID:	11-5860-2909	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	21 Mar-18 15:00	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	28 Mar-18 13:45	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 23h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	11-4178-5915	Code:	CER032118	Client:	ABC Labs
Sample Date:	21 Mar-18 15:00	Material:	Copper chloride	Project:	REF TOX
Receipt Date:		Source:	Reference Toxicant		
Sample Age:	n/a	Station:	REF TOX		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	TU
Untransformed	C > T	10	30	17.32	

Fisher Exact/Bonferroni-Holm Test

Control	vs	Group	Test Stat	P-Type	P-Value	Decision(α :5%)
Negative Control	3		1.0000	Exact	1.0000	Non-Significant Effect
	5		1.0000	Exact	1.0000	Non-Significant Effect
	10		1.0000	Exact	1.0000	Non-Significant Effect
	30*		0.0001	Exact	2.4E-04	Significant Effect
	50*		0.0000	Exact	2.7E-05	Significant Effect

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Data Summary

Conc- μ g/L	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
0	N	10	0	10	1	0	0.0%
3		10	0	10	1	0	0.0%
5		10	0	10	1	0	0.0%
10		10	0	10	1	0	0.0%
30		1	9	10	0.1	0.9	90.0%
50		0	10	10	0	1	100.0%

7d Survival Rate Detail

Conc- μ g/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
3		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
5		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
10		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30		1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
50		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7d Survival Rate Binomials

Conc- μ g/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
3		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
10		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
30		1/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
50		0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1

CETIS Analytical Report

Report Date: 28 Mar-18 15:31 (p 2 of 2)
Test Code: CER032118 | 04-8459-8953

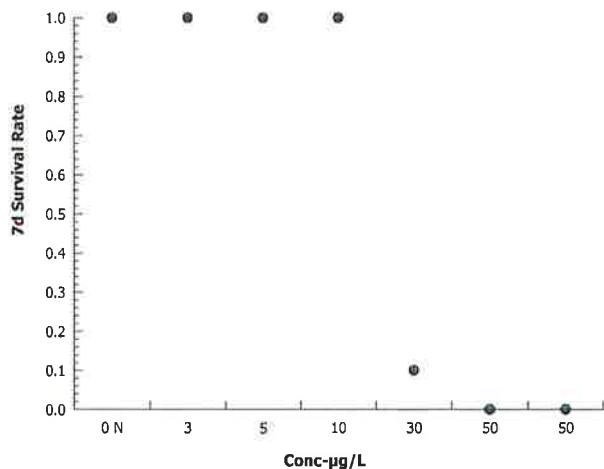
Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Analysis ID: 06-7306-6317 Endpoint: 7d Survival Rate
Analyzed: 28 Mar-18 15:30 Analysis: STP 2xK Contingency Tables

CETIS Version: CETISv1.9.2
Official Results: Yes

Graphics



CETIS Measurement Report

Report Date: 28 Mar-18 15:31 (p 1 of 2)
 Test Code: CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Batch ID:	11-5860-2909	Test Type:	Reproduction-Survival (7d)	Analyst:	
Start Date:	21 Mar-18 15:00	Protocol:	EPA/821/R-02-013 (2002)	Diluent:	Laboratory Water
Ending Date:	28 Mar-18 13:45	Species:	Ceriodaphnia dubia	Brine:	Not Applicable
Duration:	6d 23h	Source:	Aquatic Biosystems, CO	Age:	
Sample ID:	11-4178-5915	Code:	CER032118	Client:	ABC Labs
Sample Date:	21 Mar-18 15:00	Material:	Copper chloride	Project:	REF TOX
Receipt Date:		Source:	Reference Toxicant		
Sample Age:	n/a	Station:	REF TOX		

Alkalinity (CaCO3)-mg/L

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	62.25	61.38	63.12	61	63	0.366	1.035	1.66%	0
50		3	63	63	63	63	63	0	0	0.0%	0
Overall		11	62.45	61.83	63.08	61	63	0.2817	0.9342	1.50%	0 (0%)

Conductivity- μ mhos

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	350.1	346.5	353.7	347	359	1.517	4.291	1.23%	0
3		8	400.2	381.1	419.4	362	420	8.11	22.94	5.73%	0
5		8	347.1	345.9	348.3	345	349	0.5154	1.458	0.42%	0
10		8	345.4	343.4	347.3	342	348	0.8224	2.326	0.67%	0
30		8	343.4	342.2	344.6	341	345	0.4978	1.408	0.41%	0
50		3	339	336.5	341.5	338	340	0.5774	1	0.3%	0
Overall		43	356	348.7	363.3	338	420	3.607	23.65	6.64%	0 (0%)

Dissolved Oxygen-mg/L

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.613	7.387	7.838	7.1	7.8	0.09531	0.2696	3.54%	0
3		8	8.025	7.528	8.522	7.2	8.9	0.2102	0.5946	7.41%	0
5		8	8	7.551	8.449	7.2	8.9	0.1899	0.5372	6.72%	0
10		8	8.037	7.556	8.519	7.2	8.9	0.2035	0.5755	7.16%	0
30		8	8.025	7.565	8.485	7.2	8.9	0.1943	0.5497	6.85%	0
50		3	8.1	6.471	9.729	7.5	8.8	0.3786	0.6557	8.1%	0
Overall		43	7.951	7.79	8.112	7.1	8.9	0.07962	0.5221	6.57%	0 (0%)

Hardness (CaCO3)-mg/L

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	96.12	93.96	98.29	93	98	0.9149	2.588	2.69%	0
50		3	91	91	91	91	91	0	0	0.0%	0
Overall		11	94.73	92.56	96.9	91	98	0.9732	3.228	3.41%	0 (0%)

pH-Units

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	7.838	7.704	7.971	7.6	8.1	0.0565	0.1598	2.04%	0
3		8	7.775	7.716	7.834	7.7	7.9	0.025	0.07071	0.91%	0
5		8	7.712	7.63	7.795	7.5	7.8	0.03504	0.09911	1.29%	0
10		8	7.65	7.561	7.739	7.5	7.8	0.0378	0.1069	1.4%	0
30		8	7.637	7.538	7.737	7.5	7.8	0.04199	0.1188	1.56%	0
50		3	7.733	7.446	8.02	7.6	7.8	0.06667	0.1155	1.49%	0
Overall		43	7.723	7.683	7.763	7.5	8.1	0.01992	0.1306	1.69%	0 (0%)

CETIS Measurement Report

Report Date:

28 Mar-16 15:31 (p 2 of 2)

Test Code:

CER032118 | 04-8459-8953

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

Temperature-°C

Conc- μ g/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	8	24	24	24	24	24	0	0	0.0%	0
3		8	24	24	24	24	24	0	0	0.0%	0
5		8	24.01	23.98	24.04	24	24.1	0.01249	0.03531	0.15%	0
10		8	24.01	23.98	24.04	24	24.1	0.01249	0.03531	0.15%	0
30		8	24.01	23.98	24.04	24	24.1	0.01249	0.03531	0.15%	0
50	3	24	24	24	24	24	24	0	0	0.0%	0
Overall		43	24.01	24	24.01	24	24.1	0.003931	0.02578	0.11%	0 (0%)

Alkalinity (CaCO₃)-mg/L

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	63	63	63	63	63	61	61	61
50		63	63	63					

Conductivity- μ hos

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	348	347	352	347	348	353	347	359
3		417	395	419	418	420	400	371	362
5		346	347	346	349	348	345	347	349
10		342	342	347	348	347	347	345	345
30		341	342	343	345	344	345	343	344
50		338	339	340					

Dissolved Oxygen-mg/L

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	7.8	7.8	7.3	7.7	7.8	7.8	7.6	7.1
3		7.7	8.9	8.6	7.8	7.7	7.7	8.6	7.2
5		7.8	8.9	8.5	7.9	7.7	7.7	8.3	7.2
10		7.7	8.9	8.5	8	7.7	7.7	8.6	7.2
30		7.9	8.9	8.5	8	7.6	7.7	8.4	7.2
50		8	8.8	7.5					

Hardness (CaCO₃)-mg/L

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	98	98	98	98	98	93	93	93
50		91	91	91					

pH-Units

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	8.1	7.9	7.6	7.7	7.9	7.9	7.7	7.9
3		7.7	7.7	7.9	7.8	7.8	7.8	7.7	7.8
5		7.7	7.7	7.7	7.8	7.8	7.8	7.7	7.5
10		7.8	7.7	7.5	7.7	7.7	7.7	7.6	7.5
30		7.8	7.6	7.5	7.6	7.7	7.8	7.6	7.5
50		7.8	7.6	7.8					

Temperature-°C

Conc- μ g/L	Code	1	2	3	4	5	6	7	8
0	N	24	24	24	24	24	24	24	24
3		24	24	24	24	24	24	24	24
5		24	24	24	24	24	24.1	24	24
10		24	24	24	24	24	24.1	24	24
30		24	24	24	24	24	24.1	24	24
50		24	24	24					

