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January 16, 2017

Mr. Samuel Unger Executive Officer State Regional Water Quality Board Los Angeles Region 320 West 4th Street, Suite 200 Los Angeles, CA 90013

Subject: Nursery Growers Association Los Angeles County Irrigated Lands Group Conditional Waiver for Irrigated Lands ANNUAL MONITORING REPORT-YEAR ONE UNDER ORDER # R4-2016-0143 (THROUGH OCTOBER 15, 2016)

Dear Mr. Unger:

Pacific Ridgeline prepared this *Annual Monitoring Report* on behalf of Nursery Growers Association, Los Angeles County Irrigated Lands Group (LAILG). Monitoring and reporting was conducted in accordance with the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (CWIL; Order # R4-2016-0143) under the Quality Assurance Project Plan and Monitoring and Reporting Plan submitted by LAILG for the previous CWIL.

One sampling event was conducted during the final wet season of the previous CWIL and two sampling events were conducted during first dry season under the current CWIL (sampling through October 15, 2016). A total of two samples were collected at the five sites visited during the wet season sampling events. No samples were collected during the dry season.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

Respectfully submitted,

Los Angeles Irrigated Lands Group

John Schoustra NGA Board Member



ANNUAL MONITORING REPORT-YEAR ONE UNDER ORDER # R4-2016-0143 (THROUGH OCTOBER 15, 2016)

NURSERY GROWERS ASSOCIATION LOS ANGELES COUNTY IRRIGATED LANDS GROUP

January 16, 2017

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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 OCTOBER 15, 2016)

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 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, Order #R4-2010-0186. PacRL was contracted by NGA to manage the technical aspect of the LAILG.

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.

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.

Water quality impacts associated with agriculture can be primarily traced to discharges resulting from irrigation or stormwater. These discharges typically 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). This CWIIL 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. 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 attain water quality objectives in the receiving water bodies.

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The objective of this AMR is to evaluate compliance with water quality benchmarks established by the various CWILs throughout the life of the program, and to report findings to the LARWQCB as specified in the MRP. This AMR describes the monitoring efforts and results that have been undertaken by the NGA for compliance with the CWIL through October 15, 2016, along with presenting historical data collected throughout the life of the program.

Implementation and results from the WQMP will be presented in a standalone WQMP update report, and are not included in this document.

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2.0 BACKGROUND AND SAMPLING METHODOLOGY

As of December 2016, the LAILG is comprised of 271 sites and an estimated 1,853 irrigated acres. A complete list of current group members in good standing with the LAILG is included in Appendix A.

Until additional information is gathered from the group in order to apply the most recent WQMP, LAILG has been operating under the MRP developed for the previous CWIL. As outlined in the last MRP, dated April 7, 2011, the LAILG collects water quality data at 20 sampling sites throughout each year. All enrolled growers are segregated into four distinct sampling regions (Group 1 - Group 4) based on their geographic location. The majority of the sampling sites were continued from the last CWIL period and the sampling region boundaries were established to ensure that each group contained 4 of the 16 established fixed sampling sites and approximately the same number of total enrolled growers. Refer to Appendix A for all LAILG enrolled growers and sampling regions. An updated map of enrolled members is currently being prepared, and will be submitted to the LARWQCB upon completion.

A rotating sampling schedule was implemented for the 16 fixed sampling sites; 4 sites are sampled during each distinct sampling event. The sampling groups are cycled throughout the year, ensuring that each fixed sample site is visited at least once per year (Table 1). The approved sampling schedule ensures each sampling group collects a sample during each possible event (first or second, wet and dry) throughout the previous CWIL period.

YEAR		EASON CTOBER 14	WET SEASON OCTOBER 15-MAY 14				
	EVENT #1	EVENT #2	EVENT #1	EVENT #2			
1 (MAY 15, 2011- MAY 14, 2012)	GROUP 1	GROUP 2	GROUP 3	GROUP 4			
2 (MAY 15, 2012- MAY 14, 2013)	GROUP 2	GROUP 3	GROUP 4	GROUP 1			
3 (MAY 15, 2013- MAY 14, 2014)	GROUP 3	GROUP 4	GROUP 1	GROUP 2			
4 (MAY 15, 2014- MAY 14, 2015)	GROUP 4	GROUP 1	GROUP 2	GROUP 3			
5 (MAY 15, 2016- OCTOBER 15, 2016)	GROUP 1	GROUP 2	GROUP 3	GROUP 4			

Table 1 - Sampling Schedule, CWIL R4-2010-0186Table 1Sampling Schedule

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A single revolving sampling site was added to the four fixed sampling sites for each sampling event. Five sites were chosen for each sampling group region to serve as potential revolving sampling sites. Revolving sampling sites have been chosen using the criteria listed above. Fixed and revolving sampling sites are presented on Table 2 in Section 3.

For each sampling event, the revolving sampling site is selected from the list of potential revolving sampling sites for each sampling group region. The revolving site sampled is selected from the sampling group region scheduled for a particular sampling event.

If an exceedance is detected in a revolving sampling site, that site was re-visited and re-sampled when the particular sampling group region is scheduled for the following years sampling event. If no exceedance is detected, or samples are not collected, a new revolving site is selected for the following years sampling event.

In the interim of CWIL Order R4-2016-0143, sampling was conducted as outlined in Section 3.0 for the dry and wet season. Dry season sampling has already occurred, and is included in this report.

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3.0 CURRENT EVENTS

An updated WQMP was submitted to the LARWQCB on August 21, 2015. LAILG will continue to operate under the existing WQMP until enough data is collected to update to a new MRP and WQMP as required by the new CWIL. LAILG will also be operating under the existing MRP until a new MRP is developed, which is pending collection of data from growers and is anticipated to be in the second quarter of 2017.

Since the previous AMR, a number of fixed and rotating sites have also been lost, but were not replaced in anticipation of preparing a new MRP under the new CWIL. The updated site list with redacted sampling locations is presented on Table 2. Appendix A presents the most recent list of enrolled members, and Figures 1 through 1.5 presents the most recent maps of members enrolled in the program.

For the interim period under Order R4-2016-0143 and until a new MRP is developed, LAILG will be sampling the sites presented on Table 3 during the wet season of 2016-2017. The sites presented on Table 3 for the dry season have been visited and are presented in this report. These sites were chosen in the interim due to ease of access, the need for additional and/or new data, and/or a high likelihood of being able to collect stormwater samples.

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NAME	SITE #	APPROXIMATE GPS LOCATION	ADDRESS	ACRES IRRIGATED	CROP TYPE		
			GROUP 1	-			
Boething Treeland	19	N 34° 09' 51.1"	23475 Long Valley Road	14.68	General Ornamentals		
Farms, Inc.	19	W 118° 38' 20.7"	Woodsland Hills, CA	14.08	General Ornamentals		
Norman's Nursery	125	N 34° 05' 42.3"	8550 E Broadway	7.00	General Ornamentals		
romans runsery	125	W 118° 04' 53.5"	San Gabriel, CA	7.00	General Ornanenais		
Ultra Greens Nursery	178	N 34° 17' 57.4"	13102 Maclay Street	8.50	General Ornamentals		
		W 118° 25' 06.5"	Sylmar, CA				
Valley Sod Farms, Inc.	184	N 34° 13' 23.1"	16405 Chase Street	36.00	Sod Farms		
		W 118° 29' 34.5"	North Hills, CA GROUP 2				
Acosta Growers, Inc.	11	N 34° 06' 38.0" W 117° 54' 19.9"	669 S. Azusa Ave Azusa. CA	7.50	General Ornamentals		
		N 34° 07' 05.5"	1132 S Grand Avenue				
Glendora Gardens	110	W 117° 52' 19.8"	Glendora, CA	3.75	Retail / Multiple		
Colorama Wholesale		N 34° 08' 27.5"	1025 N. Todd Ave.				
Nursery	150	W 117° 55' 35.9"	Asuza, CA	15.30	Color Plants		
		N 34° 06' 58.1"	3425 Damien Ave				
West Covina Wholesale	189	W 117° 47' 05.1"	La Verne, CA	1.25	General Ornamentals		
		•	GROUP 3				
Colore N	21	N 34° 02' 19.1"	285 San Fidel	40.00	George 10 constale		
Coiner Nursery	31	W 118° 01' 28.4"	La Puente, CA	48.00	General Ornamentals		
H&H Nursery	64	N 33° 52' 07.1"	6220 Lakewood Boulevard	2.50	Retail / Multiple		
•	04	W 118° 08' 32.4"	Lakewood, CA	2.50	Retail / Multiple		
Centeno's Nursery and	81	N 33° 52' 46.9"	6850 Paramount Blvd	3.00	General Ornamentals		
Landscaping	01	W 118° 09' 20.7"	Long Beach , CA	5.00	General Ornanenais		
SY Nursery Inc.	168	N 33° 50' 59.2"	19900 S Pioneer Blvd	4.75	General Ornamentals		
~ · · · · · · · · · · · · · · · · ·		W 118° 04' 36.0"	Cerritos, CA				
			GROUP 4				
ABC Nursery, Inc.	4	N 33° 52' 55.7"	424 E. Gardena Boulevard	11.51	General Ornamentals		
• ·		W 118° 16' 06.0" N 33° 52' 51.1"	Gardina, CA				
New West Growers 53			1601 S. Santa Fe Ave	1.70	General Ornamentals		
		W 118° 12' 56.3" N 33° 51' 18.7"	Compton, CA Between Flagler/Paulina				
T-Y Nursery	176	W 118° 23' 10.9"	Redondo Beach, CA	7.50	General Ornamentals		
		N 34° 01' 10.0"	6415 Busch Drive				
Hevadu	210	W 118° 49' 05.6"	Malibu, CA	2.75	Vineyard		

Table 2 - Fixed Sampling Locations, Historical

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NAME	SITE #	SITE # APPROXIMATE GPS LOCATION ADDRESS		ACRES IRRIGATED	CROP TYPE	
			GROUP 1			
Canyon Way Nursery	26	N 34° 12' 04.9" W 118° 13' 22.3"	11745 Sherman Way Studio City, CA	4.25	General Ornamentals	
Live Art Plantscapes,	105	N 34° 14' 34.3"	18809 Plummer St	1.80	Greenhouse	
Inc. Green Landscape	143	W 118° 32' 36.1" N 34° 23' 01.2"	Northridge, CA 22216 1/2 Placerita Canyon Rd	4.00	General Ornamentals	
Nursery Sakaida Nursery, Inc.	158	W 118° 31' 34.1" N 34° 06' 49.0"	Newhall, CA 8538-8601 Longden Ave	6.89	General Ornamentals	
		W 118° 04' 54.8" N 34° 16' 23.8"	San Gabriel, CA 11157 Orcas Avenue			
Worldwide Exotics Inc.	204	W 118° 22' 06.1"	Lake Terrace, CA	2.00	General Ornamentals	
		1	GROUP 2	1		
Coiner Nursery	32	N 34° 6' 25.9" W 117°46' 19.7"	3000 B Street La Verne, CA	15.00	General Ornamentals	
West Covina Wholesale	188	N 34° 05' 38.0" W 117° 47' 31.3"	West end of Puddingstone La Verne, CA	15.25	General Ornamentals	
El Nativo Growers, Inc.	202	N 34° 06' 34.8" W 117°56' 29.8"	200 S. Peckham Azusa, CA	7.00	General Ornamentals	
Choji Matsushita	226	N 34° 06' 52.9" W 117°48' 41.1"	724 N. Cataract Avenue San Dimas, CA	1.70	Cutflower	
Organicado	255	N 34° 08' 55.0" W 117°58' 24.4"	460 Old ranch Road Bradbury, CA	1.00	Orchard	
		W 117 50 24.4	GROUP 3			
		N 34° 03' 10.6"	7900 La Merced Road			
Carreon Nursery	50	W 118° 05' 48.5"	Rosemead, CA	6.00	General Ornamentals	
Humedo Nursery	70	N 33° 55' 00.5" W 118° 06' 44.3"	10040 Imperial Highway Downey, CA	2.20	General Ornamentals	
San Gabriel Nursery & Florist	162	N 34° 02' 27.4" W 118° 06' 20.5"	2015 Potrero Grande Monterey Park, CA	6.00	General Ornamentals	
Lam Farms	212	N 33° 53' 34.5" W 118° 08' 49.9"	8600 Jefferson Street Paramount, CA	1.00	Row Crop	
ABC Rhubarb Farms	261	N 33° 57' 44.0" W 118° 09' 19.3"	6208 Clara Street Bell Gardens, CA	5.00	Row Crop	
			GROUP 4			
Color Spot Nurseries, Inc.	33	N 33° 48' 28.6" W 118° 16' 59.9"	321 W. Sepulveda Blvd Carson, CA	18.50	Color Plants	
International Plant Growers, Inc.	73	N 33° 47' 55.4" W 118° 17' 26.0"	24500 Vermont Ave Harbor City, CA	5.00	Color Plants	
Toro Nursery Inc.	170	N 33° 52' 15.3" W 118° 19' 35.9"	17585 Crenshaw Blvd Torrance, CA	15.78	Color Plants	
The Malibu Vineyard	221	N 34° 02' 36.5" W 118° 38' 47.5"	3222 Rambla Pacifico Malibu, CA	2.00	Vineyards	
Schoelkopf Vineyard	224	W 118° 38 47.5 N 34° 02' 19.6" W 118° 51' 36.9"	Malibu, CA 31499 Pacific Coast Hwy Malibu, CA	0.80	Vineyards	

Table 2 - Rotating Sampling Locations, Historical

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NAME	SITE #	APPROXIMATE GPS LOCATION	ADDRESS	SAMPLE SEASON	ACRES IRRIGATED	CROP TYPE	
ABC Nursery, Inc.	4	N 33° 52' 55.7" W 118° 16' 06.0"	424 E. Gardena Boulevard Gardina, CA	DRY / WET	11.51	General Ornamentals	
Boething Treeland Farms, Inc.	19	N 34° 09' 51.1" W 118° 38' 20.7"	23475 Long Valley Road Woodsland Hills, CA	DRY / WET	14.68	General Ornamentals	
Canyon Way Nursery	26	N 34° 12' 04.9" W 118° 13' 22.3"	11745 Sherman Way Studio City, CA	WET	4.25	General Ornamentals	
Norman's Nursery	125	N 34° 05' 42.3" W 118° 04' 53.5"	8550 E Broadway San Gabriel, CA	DRY / WET	7.00	General Ornamentals	
Colorama Wholesale Nursery	150	N 34° 08' 27.5" W 117° 55' 35.9"	1025 N. Todd Ave. Asuza, CA	DRY / WET	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	DRY / WET	6.89	General Ornamentals	
SY Nursery Inc.	168	N 33° 50' 59.2" W 118° 04' 36.0"	19900 S Pioneer Blvd Cerritos, CA	DRY / WET	4.75	General Ornamentals	
T-Y Nursery	176	N 33° 51' 18.7" W 118° 23' 10.9"	Between Flagler/Paulina Redondo Beach, CA	DRY / WET	7.50	General Ornamentals	
Ultra Greens Nursery	178	N 34° 17' 57.4" W 118° 25' 06.5"	13102 Maclay Street Sylmar, CA	DRY / WET	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	DRY	36.00	Sod	
West Covina Wholesale	188	N 34° 05' 38.0" W 117° 47' 31.3"	West end of Puddingstone La Verne, CA	WET	15.25	General Ornamentals	
El Nativo Growers	202	N 34° 06' 38.2" W 117° 56' 26.4"	200 S. Peckham Azusa, CA	DRY	7.00	General Ornamentals	

Table 3 – Interim Sampling Locations

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4.0 SAMPLING EVENTS

During the wet season of this reporting period, which lasted from October 15, 2015 through May 14, 2016, fixed and rotating sampling sites from Group #3 (Table 2) were visited on January 15, 2016. There was insufficient precipitation to initiate a second sampling event. During the sampling event for Group #3 a total of two of the five sites had sufficient runoff to conduct sampling.

During the dry season of this reporting period, which lasted from May 15, 2016 through October 14, 2016, the interim sites listed in Table 3 were visited on September 9 and September 20, 2016. All sampling 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 are included in Section 6.

A total of 74 samples have been collected by LAILG during the life of the program. The majority of the samples were collected during the first two years of the CWIL, prior to the suspension of the monitoring group. Samples were primarily 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 4. A complete history of collected samples in presented in Appendix B.

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	CWIL Order # R4-2005-0080														
		YEA	R 1 ¹			YEA	$\mathbf{R} 2^2$		YEA	AR 3	YEA				
	Dry Season		Wet Season		Dry S	eason	Wet Season		Dry Season	Wet Season	Dry Season Wet Season		Total		
	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event			
	#1	#2	#1	#2	#1	#2	#1	#2	#1	#1	#1	#1			
Number of Samples Collected	5	3	14	8	2	1	8	11	0	ns*	0	ns*	52		
Total Number of 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																					
	Interim Sampling YEAR 1				YEAR 2				YEAR 3				YEAR 4				Total					
	Event ³ Dry Season V		Dry Season Wet Season		Dry Season Wet Season		Dry Season Wet Season			Dry Season		Wet Season		Dry Season		Wet Season		Totai				
	March									Event												
	2011	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2	
Samples Collected	4	0	0	4	4	0	0	0	0	0	0	5	0	0	0	2	1	0	0	2	0	22
Sites Visited	4	5	5	5	5	5	5	na	na	5	5	5	na	5	5	5	5	5	5	5	na	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					
	YEA	R 1 ⁴	Total				
	Dry S	Dry Season					
	Event	Event					
	#1	#2					
Samples Collected	0	0	0				
Sites Visited	5	5	10				

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

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5.0 WATER QUALITY BENCHMARKS

Samples were collected and analyzed as presented in the MRP and QAPP. Table 5 presents the list of constituents analyzed during this reporting period.

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

Table 5 - List of Constituents for Testing

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 sufate, 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 TUc chronic toxic unit
- TUcchronic toxic unitNTUnephalitic turbidity units

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5.1 Water Quality Benchmarks

The following tables present water quality benchmarks that apply to this program. They are derived from language included in Appendix 1 and Appendix 2 of the 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*, dated June 13, 1994. 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 6 outlines the site-specific water quality objectives and associated fixed sampling sites used to evaluate general chemistry results for this report. Rotating sites are evaluated on a case-by-case basis.

Watershed/stream reach	NGA Site #	Ammonia	TDS	Sulfate	Chloride	Nitrogen	TSS	Copper (µg/L)	Phosphate		
os Angeles River:											
Between Figueroa and Willow St.	53, 81	a)	1,500	350	150	8	-	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]	_		
Above Figueroa St.	19, 184	a)	950	300	150	8	-	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]	_		
Rio Hondo above Santa Ana Freeway	125	a)	750	300	150	8	-	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]	_		
Pacoima Wash above Pacoima spreading grounds	178	a)	250	30	10	MUN	_	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]	_		
San Gabriel River:											
Between Firestone Blvd. and San Gabriel River Estuary	168, 64	a)			MUN		_	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]	_		
Between Ramona and Firestone Blvd.	11, 31, 189, 110	a)	750	300	150	8	_	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]	_		
Between Morris Dam and Ramona Blvd.	150	a)	450	100	100	8	-	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]	_		
Dominguez Channel	4	a)	MUN				-	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]			
Santa Monica Bay	176, 210	a)	a) MUN				—	CCC=0.960e ^[(0.8545(in (hardness)))+(-1.702)]			
USEPA Municipal Drinking Water Standa	a)	500 250 400 10			10	-	1.3 (mg/L)				

Table 6 - Water Quality Benchmarks, General Chemistry

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

a) Limit varies as a factor of temperature and pH. Objectives based on corresponding field readings for WARM water (One-hour average concentration), as outlined in the 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.

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Pesticides

Pesticide water quality objectives were taken from the Waiver, USEPA ALB guidelines, and the California Toxics Rule. Table 7 presents pesticide benchmarks outlined in the Waiver. Table 8 presents OC pesticide benchmarks outlined by the California Toxics Rule.

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 7 - Water Quality Benchmarks, Pesticides, CWIL

C O N S T I T U E N T	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 9 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.

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		CAS Number]	Fish	Inver	tebrates	Nonvascular Plants	Vascular Plants	Office of Water Aquatic Life Criteria		
Pesticides	Footnote		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	0.055	0.08	0.036	_	—	_	—	
Coumaphos	10	56-72-4	140	11.7	0.037	0.0337		_	—	—	
Dichlovos (DDVP)		62-73-7	91.50	5.200	0.035	0.0058	14,000	_	—	_	
Dimethoate	9	60-51-5	3100	430	21.5	0.5	84	_		—	
Disulfoton	9	298-04-4	19.5	4	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	16.5	8.6	0.295	0.035	2,400	>9,630		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	9.5		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	0.091	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	0.105	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	0.0106	0.0014	68	—		—	
Prallethrin		23031-36-9	6	3	3.1	0.65	_	—		_	
Sumithrin		26002-80-2	7.9	1.1	2.2	0.47	_	—		—	
Telfluthrin		79538-32-2	0.03	0.004	0.035	0.008	_		—	—	

Table 9 - Water Quality Benchmarks, Pesticides, Aquatic Life Benchmarks

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.

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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 was conducted for *Pimephales promelas* (fathead minnow), *Ceriodaphnia* (water flea), and *Selenastrum capricornutum* (green algae).

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: biostimulatory substances, temperature, pH, turbidity, and Total Suspended Solids. Table 10 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.

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Constituent	Narrative Objective	Applicable Benchmarks				
рН	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.	$6.5 \le pH \le 8.5$ 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°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 determintation shall be less than 5 mg/L, except when natural conditions cause lesser concentrations.	\geq 5 mg/L				
	The dissolved owygen 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 mg/L				
	The dissolved owygen 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 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 contrallable 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 smbient waters outside mixing zones.	$\leq 1.0 \text{ Tuc}^{[3]}$				
Biostimulatory Substances	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growwth to the extent that such growth causes nuisance or adversely affect benficial 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 muneric benchmarks.				

Table 10 - Water Quality Benchmarks, Field Monitoring and Toxicity

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6.0 INDIVIDUAL SAMPLING SITE RESULTS

6.1 SAMPLING SITES

This section presents current and historical sampling events on a site by site basis for sampling sites chosen for this program. Information includes: a summary of detected constituents from water quality sampling, photographs from visits conducted during the third year of the current program, site maps, and basic site information. All permanent sampling sites are included, along with the rotating sampling sites that were visited this sampling year. Samples collected from sampling sites that are no longer operating or from rotating sampling sites not visited this quarter are evaluated in Section 7 and included 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.

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6.1.1 GROUP 1

NGA SITE #19

Sampling Group: Group 1 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"

September 2, 2016, 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 - Seven samples collected to date. This site was visited during the first dry season sampling event during this sampling year; no runoff was observed.

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

Aerial photography of the site is presented on Figure 2.

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				General Chemistry (mg/L)											
Site Samp	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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	2.400**	53	160	2.8	1,000	2.4**	4.7	650	319	128	0.056

 Table 2 - Summary of samples collected, NGA #19

			OC Pes	ticides	OP	Pyd Pesticides		
			(ng	/L)		(ng/L)		
Site	Sample #	Date	Total DDT	Total				Total sum of
			and	Total Chlordane	Chlorpyrifos	Diazinon	Malathion	all detected
			Derivatives	Cilioiualle				Pyrethroids
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

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

ng/L nanograms per liter

OC Organochlorinated Pesticide

OP Organophosphorus Pesticide

Pyd Pyrethroid Pesticide

na Constituent not analyzed

nd Constituent not detected

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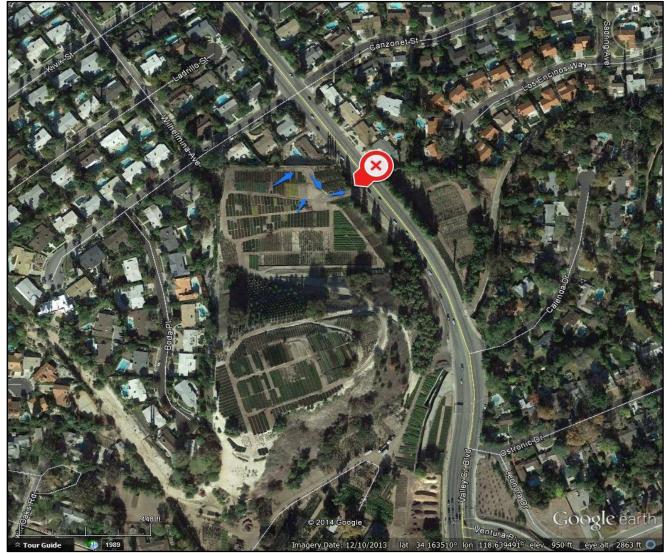


Figure 2 – Aerial Photograph of NGA #19 and General Sampling Location



General Sampling Location

General Surface Flow to Sampling Location

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NGA SITE #124/125

Sampling Group: Group 1 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"

September 20, 2016, 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 - Seven samples collected to date. This site was visited during the second dry season sampling event during this sampling year; no runoff was observed.

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

Aerial photography of the site is presented on Figure 3.

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-	<u> </u>														
				General Chemistry (mg/L)											
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrat	e Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	Ca	Cu
NGA #124	NGA-#124-LAILG-1	8/13/07	9.8	69.23	3.5006	72.48	8 206.25	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	1 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	4 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	28.30	6 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	3 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
				OC Pestic (ng/L)			OP Pestici	des (ng/L)	Py Pestic (ng/	ides					
Site	Sample #	Date	Total DDT and Derivatives	Dieldrin	Total Chlordane		Chlorpyrifos	Malathio	alathion Total sum of all detected Pyrethroids						
NGA #124	NGA-#124-LAILG-1	8/13/07	51.5	na	34		nd	nd	136	i.9					
NGA #124	NGA-#124-LAILG-2	12/7/07	37.4	na	11.4	4	nd	nd	3,70	4.3					
NGA #124	LAILG-NGA#124-3	1/5/08	nd	na	17.1	1	nd	nd	1,89	8.6					
NGA #124	LAILG-NGA#124-4	11/26/08	19.3	na	8.2		nd	nd	7,53	6.1					
NGA #124	LAILG-NGA 124-5	12/15/08	10.4	na	13.0	6	nd	85.3	19,28	31.3					
NGA #124	LAILG-NGA 124-6	3/21/11	nd	33	nd		10	nd	169	9.8					
NGA #124	LAILG-NGA 124-7	2/28/14	nd	nd	nd		17	13	3,9	16					

Table 3 - Summary of samples collected, NGA #124

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

ng/L nanograms per liter

OC Organochlorinated Pesticide

OP Organophosphorus Pesticide

Pyd Pyrethroid Pesticide

na Constituent not analyzed

nd Constituent not detected

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Broadwa Dain lesto © 2014 Goog Googleeart 340 ft lat 34.099432° lon -118.085688° 4/16/2013 404 ft Imagen 3146 Date

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



General Sampling Location



General Surface Flow to Sampling Location

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NGA SITE #178

Sampling Group: Group 1 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"

September 20, 2016, 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 - Two samples collected to date. This site was visited during the second dry season sampling event during this sampling year; not enough runoff was observed to collect a sample.

Historical sampling results for this site are presented in Table 13.

Aerial photography of the site is presented on Figure 4.

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Table 4 -	Summarv	of samples	collected.	NGA #178
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0, secp. es		1.011.011.0

				General Chemistry (mg/L)											
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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	2.200**	10	370	2.4	940	2.2	3.6	270	324	130	0.030

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

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

nanograms per liter ng/L

OC

Organochlorinated Pesticide Organophosphorus Pesticide OP

Pyd Pyrethroid Pesticide

Constituent not analyzed na

Constituent not detected nd

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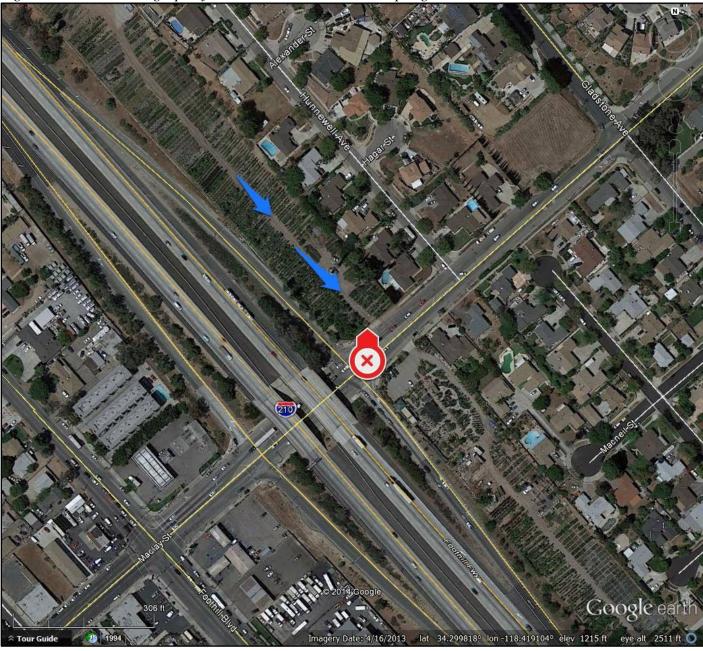


Figure 4 – Aerial Photograph of NGA #178 and General Sampling Location



General Sampling Location

1

General Surface Flow to Sampling Location

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NGA SITE #184

Sampling Group: Group 1 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"

September 20, 2016, 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** - Three samples collected to date. This site was visited during the second dry season sampling event during this sampling year; no runoff was observed.

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

Aerial photography of the site is presented on Figure 5.

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				General Chemistry (mg/L)											
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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

#### Table 5 - Summary of samples collected, NGA #184

			OC Pes (ng		OP Pesticides (ng/L)	Pyd Pesticides (ng/L)	
Site	Sample #	Date	Total DDT and Derivatives	Total Chlordane	No OP Pesticides	Total sum of all detected Pyrethroids	
NGA #184	LAILG-NGA 184-1	11/26/08	nd	nd	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	

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

ng/L nanograms per liter

OC Organochlorinated Pesticide

OP Organophosphorus Pesticide

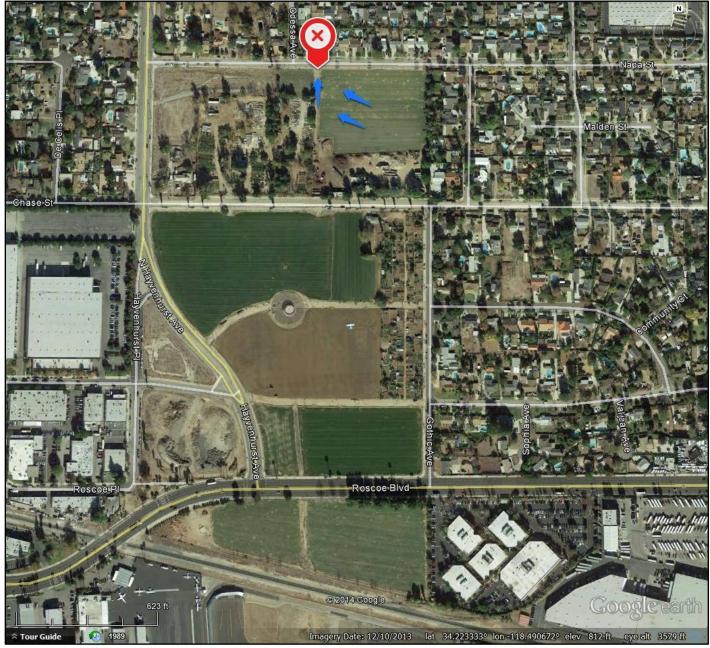
Pyd Pyrethroid Pesticide

na Constituent not analyzed

nd Constituent not detected

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





General Sampling Location



General Surface Flow to Sampling Location

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6.1.2 GROUP 2

#### NGA SITE #11

Sampling Group: Group 2 Sampling Frequency - Fixed Total/Irrigated Acres: 10/7.5 Acres Sample site GPS location: N 34° 06' 38.4" W 117° 54' 41.5"

**Site Drainage** - The topography is relatively flat, and drains west as surface flow. Based on drainage properties and site access, the western gate of the eastern property was chosen as the most likely sampling location.

Sampling - No samples collected to date. This site was not visited during this sampling year.

There are no historical sampling results for this site.

Aerial photography of the site is presented on Figure 6.

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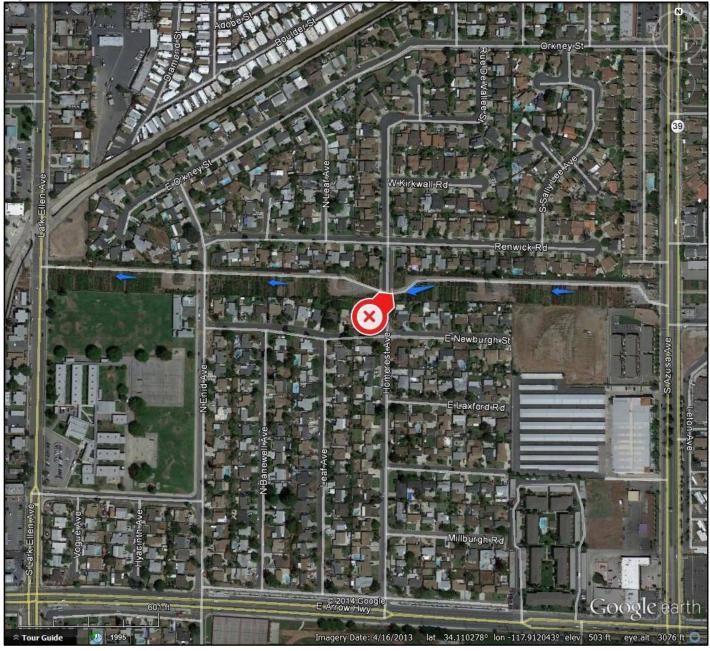


Figure 6 – Aerial Photograph of NGA #11 and General Sampling Location



General Sampling Location

1

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#### NGA SITE #109/110

Sampling Group: Group 2 Sampling Frequency - Fixed Total/Irrigated Acres: 1.8/1.0 Acres Sample site GPS location: N 34° 07' 4.8" W 117° 52' 22.8"

**Site Drainage -** The site drains southward into a dirt road and eventually to Big Dalton Wash. Based on drainage and runoff indicators, the southern edge of the property exhibiting the most flow will be chosen as the sampling location.

**Sampling** - Two samples collected to date. No samples have been collected since 2008, after BMP improvements were implemented. This site was not visited during this sampling year.

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

Aerial photography of the site is presented on Figure 7.

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# Table 6 - Summary of samples collected, NGA #109/110

							General Cher	mistry (mg/L)				
Site	Sample #	Date	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 # 110	LAILG-NGA 110-2	12/15/08	0.31	28.59	1.186	8.48	50.87	1.469	328	1.6	1.868	93

				esticides 1g/L)	OP Pest (ng/		Pyd Pesticides (ng/L)
Site	Sample #	Date	Total DDT and Derivatives		Chlorpyrifos		Total DDT and Derivatives
NGA #110	LAILG-NGA110-1	1/4/08	nd		88.5	534.8	0
NGA # 110	LAILG-NGA 110-2	12/15/08	6.2		nd	79.8	67.2

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

ng/L nanograms per liter

OC Organochlorinated Pesticide

OP Organophosphorus Pesticide

Pyd Pyrethroid Pesticide

na Constituent not analyzed

nd Constituent not detected

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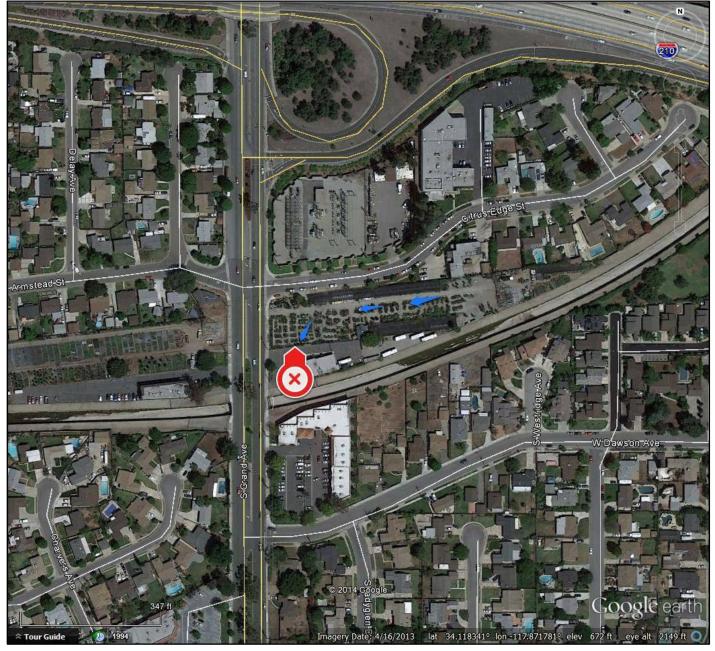


Figure 7 – Aerial Photograph of NGA #109/110 and General Sampling Location



General Sampling Location



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NGA SITE #150

Sampling Group: Group 2 Sampling Frequency - Fixed Total/Irrigated Acres: 26.0/15.3 Acres Sample site GPS location: N 34° 08'27.3" W 117° 55' 33.8"

September 20, 2016, dry season, no sample collected



**Site Drainage** – The majority of the growing areas of the site drain to the center, where there is a sump pump which catches and re-routs all the irrigation and storm runoff from the site into two collection ponds for reuse. The portion of the property that was formerly the sampling location has been sold to the neighbor, and no longer has any irrigated lands. Based on the new site layout, there are concrete gutters that drain the paved portions of the site where temporary plant storage is located for shipping. The end if the gutter was chosen as the sampling location, prior to comingling with the neighboring property and entering the storm drain.

**Sampling** - Six samples collected to date. This site was visited during the first wet season sampling event during this sampling year; not enough runoff was observed to collect a sample.

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

Updated aerial photography of the site is presented on Figure 8.

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								General	l Chemistry	y (mg/L)					
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	Ca	Cu
NGA #150	NGA-#150-LAILG	9/25/07	52.4	95.9	26.84	355.6	87	22.5	2279	23	24	57	na	na	na
NGA #150	NGA #150-LAILG-2	12/7/07	2.9	27.34	14.0243	80.89	56.59	9.43	780	8.89	9.445	40	na	na	na
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	na	na	na
NGA # 150	LAILG-NGA 150-4	12/15/08	15.75	47.27	26.0911	268.53	125.27	24.935	1,704	2.94	24.75	333.5	na	na	na
NGA # 150	LAILG-NGA 150-5	3/21/11	3.7	28	12	120	60	32	1,200	12.00	32	110	300	120	0.031
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

Table 7 - Summary of samples collected, NGA #150

				OC Pestici (ng/L)	/L) Total Chlordane nd nd nd	OP Pesticid	es (ng/L)	Pyd Pesticides (ng/L)
Site	Sample #	Date	Total DDT and Derivatives	Aldrin	Total Chlordane	Chlorpyrifos	Malathion	Total sum of all detected Pyrethroids
NGA #150	NGA-#150-LAILG	9/25/07	nd	nd	nd	nd	nd	41,733.0
NGA #150	NGA #150-LAILG-2	12/7/07	nd	35.2	nd	nd	nd	40,296.5
NGA # 150	LAILG-NGA 150-3	11/26/08	nd	nd	nd	nd	nd	42,355.2
NGA # 150	LAILG-NGA 150-4	12/15/08	nd	nd	nd	90.2	nd	41,952.4
NGA # 150	LAILG-NGA 150-5	3/21/11	nd	nd	nd	33	nd	528
NGA # 150	LAILG-NGA-150-6	12/2/14	nd	nd	nd	nd	nd	5,370

Results above CWIL Limits are presented in BOLD.

- mg/L milligrams per liter
- ng/L nanograms per liter
- OC Organochlorinated Pesticide
- OP Organophosphorus Pesticide
- Pyd Pyrethroid Pesticide
- na Constituent not analyzed
- nd Constituent not detected

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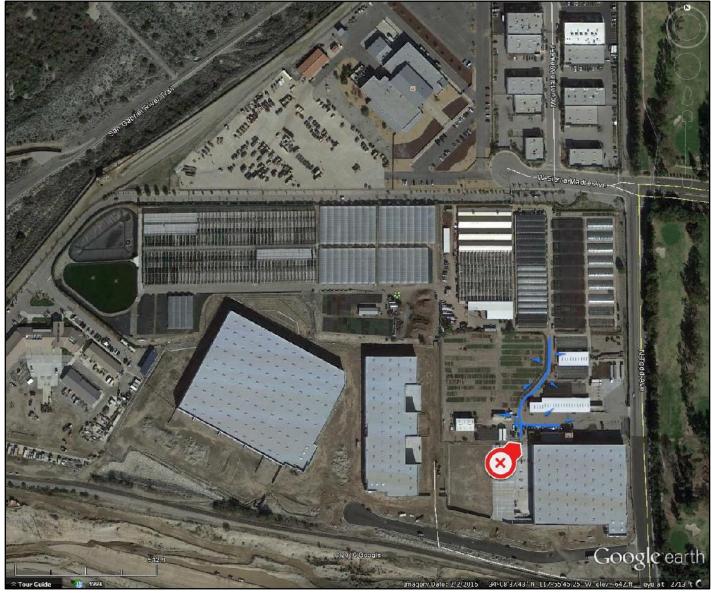


Figure 8 – Aerial Photograph of NGA #150 and General Sampling Location



General Sampling Location



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#### NGA SITE #189

Sampling Group: Group 2 Sampling Frequency - Fixed Total/Irrigated Area: 1.5/1.25 Acres Sample site GPS location: N 34° 06' 59.1" W 117° 47' 03.9"

**Site Drainage** - The western end of the site drains westward into a grass field that borders the edge of the property. The eastern half drains eastward towards Damien Avenue as sheet flow. Based on drainage properties, the eastern edge of the property along Damien Avenue was identified as the anticipated sampling location.

**Sampling** - Two samples collected to date. No samples have been collected since 2008, after BMP improvements were implemented. This site was not visited during this sampling year.

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

Aerial photography of the site is presented on Figure 9.

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# Table 8 - Summary of samples collected, NGA #189

							General Cher	mistry (mg/L)	)			
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS
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 # 189	LAILG-NGA 189-2	12/15/08	0.54	31.28	0.6795	9.87	41.27	0.813	220	0.99	1.261	111.3

			OC Pest (ng/		OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
Site	Sample #	Date	Total DDT and Derivatives	Total Chlordane	Malathion	Total sum of all detected Pyrethroids
NGA # 189	LAILG-NGA189-1	1/4/08	22.5	14.9	26.9	0
NGA # 189	LAILG-NGA 189-2	12/15/08	nd	nd	nd	6.1

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

ng/L nanograms per liter

OC Organochlorinated Pesticide

OP Organophosphorus Pesticide

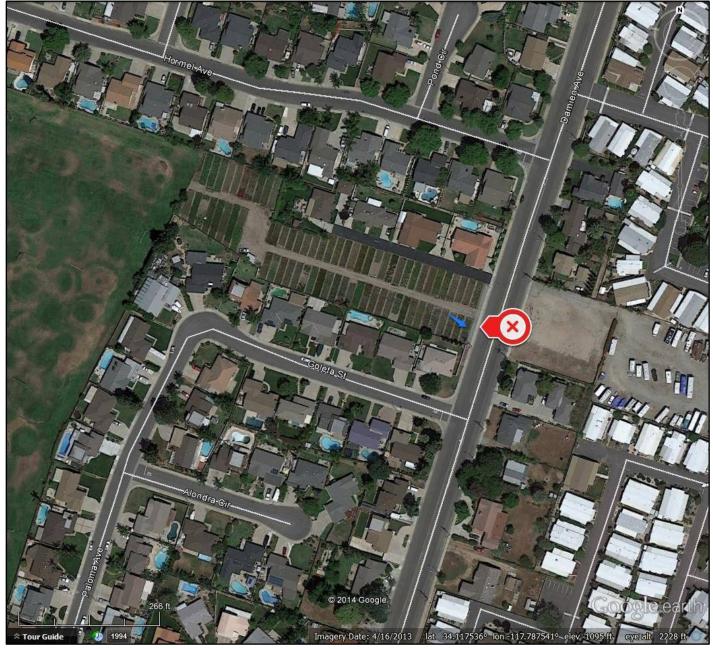
Pyd Pyrethroid Pesticide

na Constituent not analyzed

nd Constituent not detected

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Figure 9 – Aerial Photograph of NGA #189 and General Sampling Location





General Sampling Location

1

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6.1.3 GROUP 3

### NGA SITE #31

Sampling Group: Group 3 Sampling Frequency - Fixed Total/Irrigated Acres: 62.0/62.0 Acres Sample site GPS location: N 33° 3' 0" W 118° 0' 14.4"

January 15, 2015, wet season, no sample collected



**Site Drainage** - The site drains southwest, trough ditches that ultimately enter a a catch basin. The site has implemented a number of BMPs, including re-directing runoff from the 605 Freeway away from growing operations at the site. All operations at the site discharge to the main catch basin. Based on site improvements, sampling would only take place if the catch basin overflows and releases water through additional BMPs to the storm drains on the northwest corner of the property.

**Sampling** - Four samples collected to date. This site was visited during the first wet season sampling event during this sampling year. Water was discharging from the freeway through the property, but no runoff was observed from the property catch basin.

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

Aerial photography of the site is presented on Figure 10.

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<i></i>								General	Chemistry	r (mg/L)					
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	Ca	Cu
NGA # 31	LAILG-NGA 31-1	9/23/08	0.13	82.13	1.562	17.3	134.93	1.472	602	2.34	1.813	162	na	na	na
NGA # 31	LAILG-NGA 31-2	11/26/08	0.76	6.12	0.474	3.6	14.84	0.497	104	1.63	1.94	353	na	na	na
NGA # 31	LAILG-NGA 31-3	12/15/08	4.32	36.98	3.0228	12.14	57.58	2.148	364	2.87	3.155	85.5	na	na	na
NGA # 31	LAILG-NGA 31-4	3/17/12	1.1	55	1.0	12	160	0.90	520	1.0	2.0	81	240	95	0.027

# Table 9 - Summary of samples collected, NGA #31

			OC Pe	sticides	OP Pesti	icides	Pyd Pesticides
			(ng	g/L)	(ng/]	L)	(ng/L)
Site	Sample #	Date	Total DDT	Total			Total sum of
			and	Total Chlordane	Chlorpyrifos	Malathion	all detected
			Derivatives	Chlordane			Pyrethroids
NGA # 31	LAILG-NGA 31-1	9/23/08	13.5	15.2	nd	nd	78.6
NGA # 31	LAILG-NGA 31-2	11/26/08	nd	17.9	nd	nd	460.2
NGA # 31	LAILG-NGA 31-3	12/15/08	nd	nd	44.5	3,433.9	52.6
NGA # 31	LAILG-NGA 31-4	3/17/12	nd	nd	nd	nd	35.9

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

ng/L nanograms per liter

OC Organochlorinated Pesticide

OP Organophosphorus Pesticide

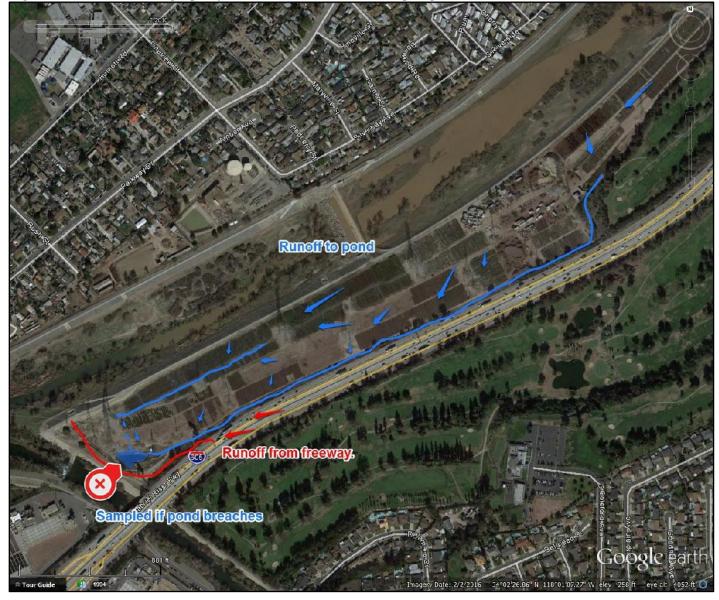
Pyd Pyrethroid Pesticide

na Constituent not analyzed

nd Constituent not detected

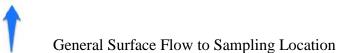
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Figure 10 – Aerial Photograph of NGA #31 and General Sampling Location





General Sampling Location



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NGA SITE #64

Sampling Group: Group 3 Sampling Frequency - Fixed Total/Irrigated Acres: 5.5/2.5 Acres Sample site GPS location: N 33° 52' 05.9" W 118° 08' 32.3"

January 5, 2016, wet season, sample collected



**Site Drainage -** The site drains to the west, into two drains on the western border of the property that feed directly to Lakewood Boulevard. Based on drainage, one of the western drains was chosen as the sampling location.

**Sampling** - Four samples collected to date. This site was visited during the first wet season sampling event during this sampling year; a sample was collected on January 5, 2016.

Historical sampling results for this site are presented in Table 19.

Aerial photography of the site is presented on Figure 11.

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								General	Chemistry	r (mg/L)					
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	Ca	Cu
NGA #64	LAILG-NGA-64-1	1/23/08	0.2	3.82	0.2818	3.83	101.1	0.3	nd	0.46	0.393	76	na	na	na
NGA #64	LAILG-NGA-64-2	12/15/08	1.15	12.38	0.4307	5.39	35.34	0.49	232	0.71	0.868	112	na	na	na
NGA #64	LAILG-NGA-64-3	3/17/12	0.79	5.8	0.28	0.70	8.4	0.32	57	0.28	1.5	500	51	21	0.047
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

# Table 10 - Summary of samples collected, NGA #64

			OC Pestic (ng/L)		OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
Site	Sample #	Date	Total DDT and Derivatives	Toxaphene	No OP	Total sum of all detected Pyrethroids
NGA #64	LAILG-NGA-64-1	1/23/08	0	0	Pesticides	47.4
NGA #64	LAILG-NGA-64-2	12/15/08	43.3	666	Detected	110
NGA #64	LAILG-NGA-64-3	3/17/12	28	nd		22
NGA #64	LAILG-NGA-64-4	1/5/16	nd	nd		7.3

Results above CWIL Limits are presented in BOLD.

- mg/L milligrams per liter
- ng/L nanograms per liter
- OC Organochlorinated Pesticide
- OP Organophosphorus Pesticide
- Pyd Pyrethroid Pesticide
- na Constituent not analyzed
- nd Constituent not detected

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111 1 1 1 24 60 worth-S 014 Google Google ear 61 ft 33.868672° lon eye alt 1357 ft Date: 4/16/20 lat 118,141278 elev

Figure 11 – Aerial Photograph of NGA #64 and General Sampling Location



General Sampling Location



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NGA SITE #81

Sampling Group: Group 3 Sampling Frequency - Fixed Total/Irrigated Acres: 4.7/3.0 Acres Sample site GPS location: N 33° 52' 46.9" W 118° 09' 20.7"

January 5, 2016, wet season, no sample collected



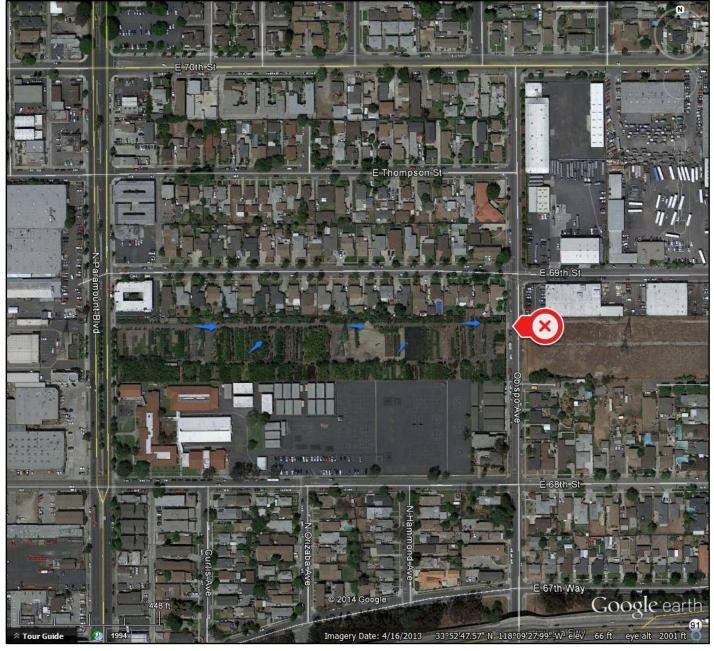
**Site Drainage** – The site drains to the east as sheet flow towards Obispo Avenue. The site is relatively flat with a small surface gradient.

**Sampling** - No samples collected to date. This site was visited during the first wet season sampling event during this sampling year; no runoff was observed.

There are no historical sampling results for this site.

Aerial photography of the site is presented on Figure 12

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# Figure 12–Aerial Photograph of NGA #81 and General Sampling Location



General Sampling Location

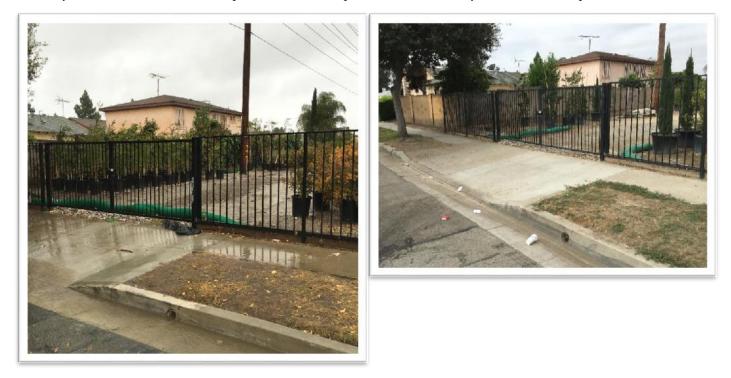


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#### NGA SITE #168

Sampling Group: Group 3 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"

January 5, 2016, wet season, sample collected September 2, 2016, 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** - Eight samples collected to date. This site was visited during the first wet season sampling event and first dry season sampling event during this sampling year; a sample was collected on January 5, 2016.

Historical sampling results for this site are presented in Table 20.

Aerial photography of the site is presented on Figure 13.

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								General	l Chemist	ry (mg/L)					
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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
				OC Pest (ng/)			OP esticides (ng/L)	Pyd Pestic (ng/L)							
Site	Sample #	Dat	Total	DDT and DDT ard	Total Chlorda	I M:	alathion	Total sum detecte Pyrethro	ed						
NGA #168	NGA-#168-LAILG-	1 8/13/	07	nd	nd		nd	1,379.	1						
NGA #168	ILGNGA-#168-2	9/28/	07	118	nd		nd	964.0	)						
NGA #168	NGA-#168-LAILG-	3 11/30	/07	2.7	2.8		8.9	466.1							
NGA #168	LAILG-NGA-168-4	4 1/25/	08	19.2	nd		nd	187.9	)						
NGA #168	LAILG-NGA-168-	5 12/15	/08	11.8	nd		38.9	1,375.	9						
NGA #168	LAILG-NGA-168-	5 3/17/	12	nd	nd		nd	72							
NGA #168	LAILG-NGA-168-	7 5/15/	15	nd	nd		nd	484.3	;						
NGA #168	LAILG-NGA-168-8	3 1/5/1	6	nd	nd		nd	379							

# Table 11 - Summary of samples collected, NGA #168

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

ng/L nanograms per liter

OC Organochlorinated Pesticide

OP Organophosphorus Pesticide

Pyrethroid Pesticide Pyd

Constituent not analyzed na

nd Constituent not detected Page 50 LAILG – AMR, 2016 January16, 2017

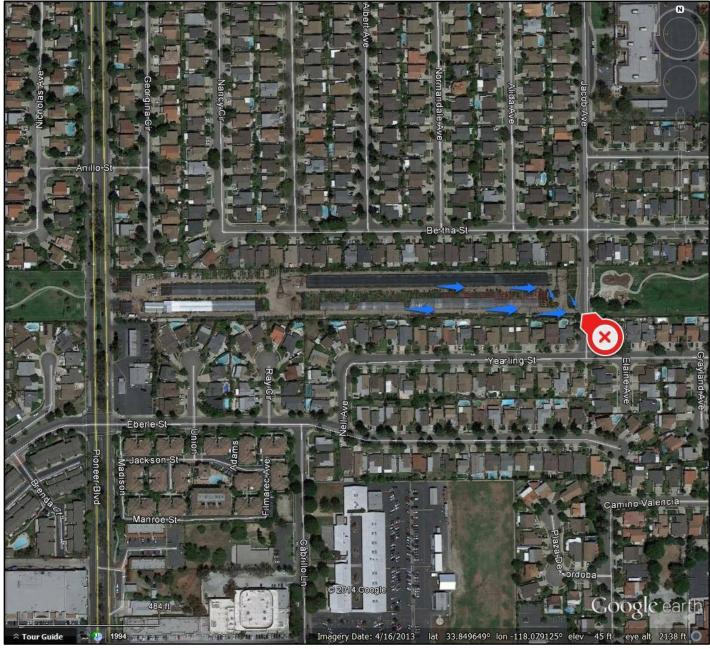


Figure 13 – Aerial Photograph of NGA #168 and General Sampling Location



General Sampling Location

1

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6.1.4 GROUP 4

#### NGA SITE #4

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

September 2, 2016, 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** – Six samples collected to date. This site was visited during the first dry season sampling event during this sampling year; no runoff was observed.

Historical sampling results for this site are presented in Table 21.

Aerial photography of the site is presented on Figure 14.

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				General Chemistry (mg/L)													
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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		

 Table 12 - Summary of samples collected, NGA #4

			OC Pesticides (ng/L)				Pyd Pesticides (ng/L)			
Site	Sample # Date Dicofol Total DDT and Chlordane Chlord		Chlorpyrifos	s 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

Results above	e CWIL I	Limits are	presented in	BOLD.

milligrams per liter	
nanograms per liter	
Organochlorinated Pesticide	
Organophosphorus Pesticide	
Pyrethroid Pesticide	
Constituent not analyzed	
Constituent not detected	
	nanograms per liter         Organochlorinated Pesticide         Organophosphorus Pesticide         Pyrethroid Pesticide         Constituent not analyzed

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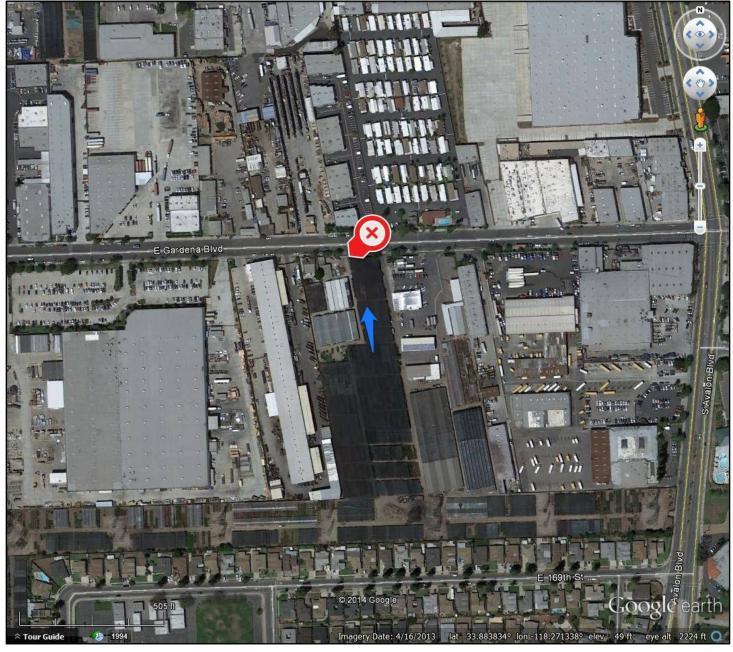


Figure 14 – Aerial Photograph of NGA #4 and General Sampling Location



General Sampling Location



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#### NGA SITE #53

Sampling Group: Group 4 Sampling Frequency - Fixed Total/Irrigated Acres: 3.5/1.7 Acres Sample site GPS location: N 33° 52' 51.1" W 118° 12' 56.3"

**Site Drainage -** The site drains into a small ditch that runs eastward into Santa Fe Avenue. Based on site topography, the eastern edge of the property by the drainage ditch was identified as the anticipated sampling location.

**Sampling** – Two samples collected to date. No samples have been collected since 2008, after BMP improvements were implemented. This site was not visited during this sampling year.

Historical sampling results for this site are presented in Table 22.

Aerial photography of the site is presented on Figure 15.

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				General Chemistry (mg/L)										
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos			
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			
NGA #53	LAILG-NGA#53-2	1/23/08	0.31	2.19	0.6425	0.76	14.92	0.82	nd	0.68	1.993			

TSS

124 516

# Table 13 - Summary of samples collected, NGA #53

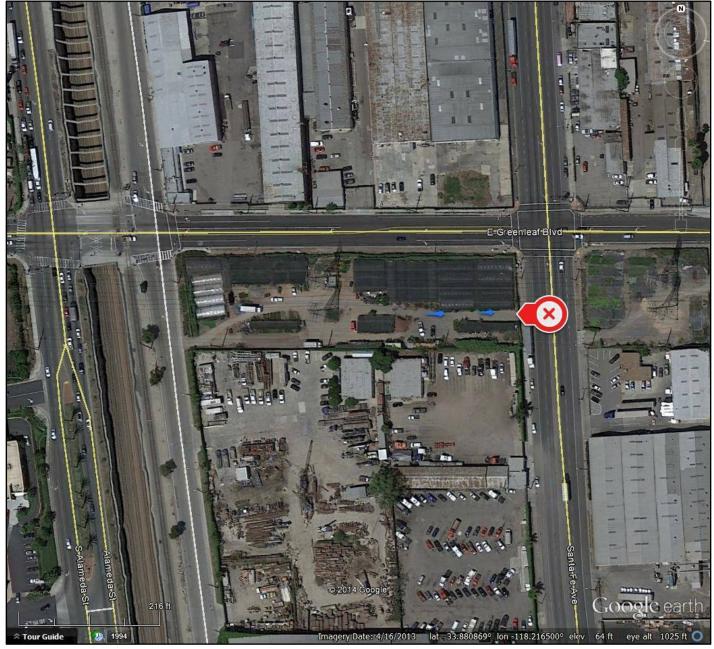
				esticides ng/L)	OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
Site	Sample #	Date	No Detected DDT and	No Detected Chlordanes	No OP Pesticides	Total sum of all detected Pyrethroids
NGA #53	LAILG-NGA#53-1	12/18/07	Derivatives	Chlordunes	Detected	11.5
NGA #53	LAILG-NGA#53-2	1/23/08				0

Results above CWIL Limits are presented in BOLD.

- mg/L milligrams per liter
- ng/L nanograms per liter
- OC Organochlorinated Pesticide
- OP Organophosphorus Pesticide
- Pyd Pyrethroid Pesticide
- na Constituent not analyzed
- nd Constituent not detected

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Figure 15 – Aerial Photograph of NGA #53 and General Sampling Location





General Sampling Location



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NGA SITE #176

Sampling Group: Group 4 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"

September 2, 2016, 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** – Two samples collected to date. This site was visited during the first dry season sampling event during this sampling year; no runoff was observed.

Historical sampling results for this site are presented in Table 23.

Aerial photography of the site is presented on Figure 16.

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				General Chemistry (mg/L)											
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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	NGA-#176-LAILG-2	3/25/12	0.30	29	0.99	8.7	43	0.99	220	0.99	2.2	550	80	32	0.066

# Table 14 - Summary of samples collected, NGA #176

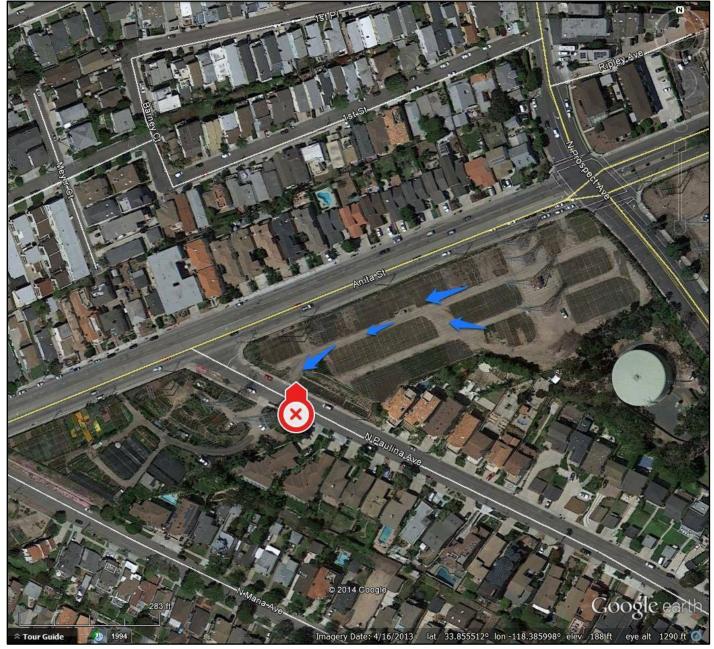
			OC Pesticides (ng/L)	OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
Site	Sample #	Date	No Detected DDT and Derivatives	No Detected OP Pesticides	Total sum of all detected Pyrethroids
NGA #176	NGA-#176-LAILG-1	12/18/07		Detected	873.9
NGA #176	NGA-#176-LAILG-2	3/25/12			305

Results above CWIL Limits are presented in BOLD.

- mg/L milligrams per liter
- ng/L nanograms per liter
- OC Organochlorinated Pesticide
- OP Organophosphorus Pesticide
- Pyd Pyrethroid Pesticide
- na Constituent not analyzed
- nd Constituent not detected

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Figure 16 – Aerial Photograph of NGA #176 and General Sampling Location



 $\mathbf{x}$ 

General Sampling Location



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NGA SITE #210

Sampling Group: Group 4 Sampling Frequency - Fixed Total/Irrigated Area: 2.0/1.4 Acres Approximate sample site GPS location: N 34° 01' 11.59" W 118° 49' 10.89"

**Site Drainage** - The vineyard is located on the northwestern section of the site. A series of concrete channels collect surface water and direct it towards the southern gate. Based on drainage properties, the area immediately outside the southern gate was chosen as the sampling location.

Sampling – Two samples collected to date. This site was not visited during this sampling year.

Historical sampling results for this site are presented in Table 24.

Aerial photography of the site is presented on Figure 17.

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Tał	ole .	15 -	Summary	of	sample	s col	lected,	NGA	A #210	
-----	-------	------	---------	----	--------	-------	---------	-----	--------	--

				General Chemistry (mg/L)											
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Total Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	Ca	Cu
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	na	na	na
NGA # 210	LAILG-NGA 210-2	3/25/12	0.20	110	1.4	0.57	250	1.3	700	1.4	2.8	86	270	110	0.0060

			OC Pesticides (ng/L)	OP Pesticides (ng/L)	Pyd Pesticides (ng/L)
Site	Sample #	Date	No OP Pesticides Detected	Malathion	Total sum of all detected Pyrethroids
NGA # 210	LAILG-NGA 210-1	11/26/08		56.4	279.8
NGA # 210	LAILG-NGA 210-2	3/25/12		41	82.7

Results above CWIL Limits are presented in BOLD.

mg/L milligrams per liter

ng/L nanograms per liter

OC Organochlorinated Pesticide

OP Organophosphorus Pesticide

Pyd Pyrethroid Pesticide

na Constituent not analyzed

nd Constituent not detected

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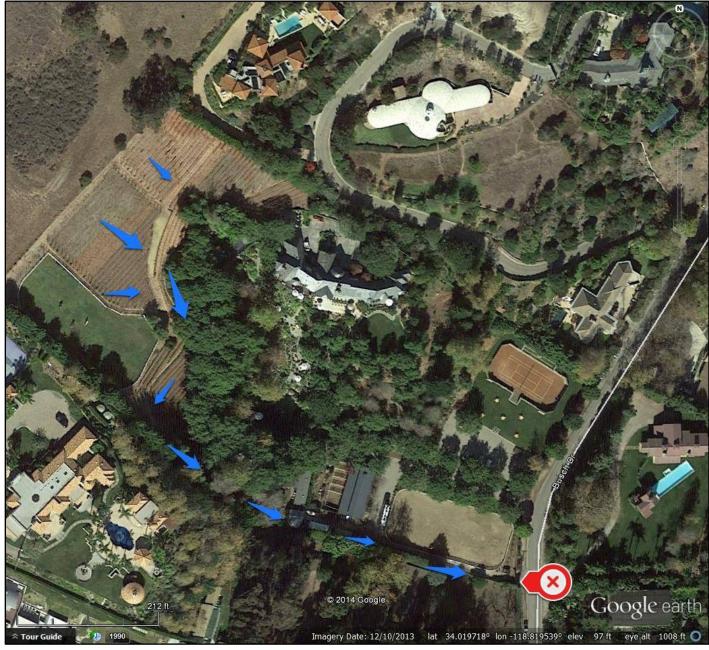


Figure 17 – Aerial Photograph of NGA #210 and General Sampling Location



General Sampling Location



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# 6.2 VISITED REVOLVING SAMPLING SITES

#### NGA SITE # 158 (Sakaida)

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

September 20, 2016, 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 visit to date with no samples collected. This site was visited during the second dry season sampling event during this sampling year; no runoff was observed.

There are no historical sampling results for this site.

Aerial photography of the site is presented on Figure 18.

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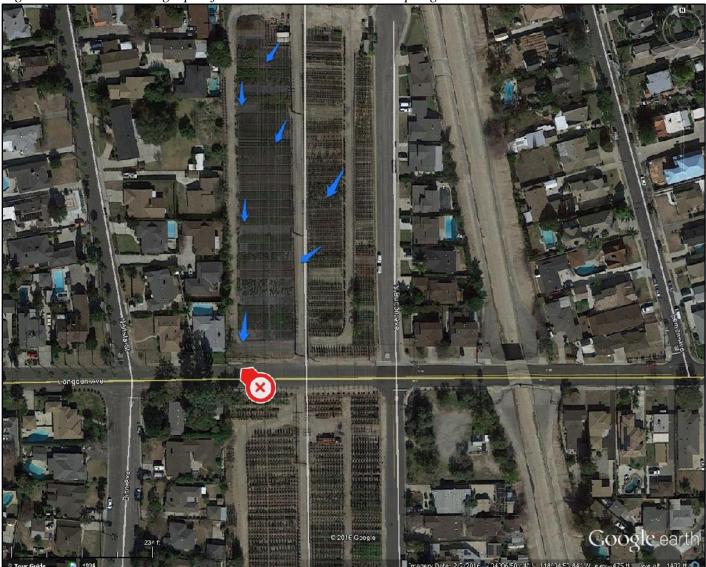


Figure 18 – Aerial Photograph of NGA #158 and General Sampling Location



General Sampling Location

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NGA SITE # 202 (El Nativo)

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

September 2, 2016, 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** – One visit to date with no samples collected. This site was visited during the first dry season sampling event during this sampling year; no runoff was observed.

There are no historical sampling results for this site.

Aerial photography of the site is presented on Figure 19.

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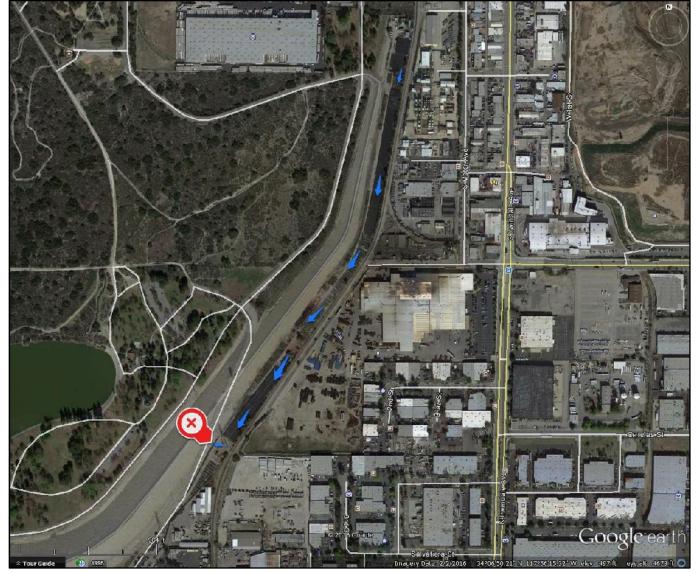


Figure 19 – Aerial Photograph of NGA #202 and General Sampling Location



General Sampling Location



General Surface Flow to Sampling Location

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#### NGA SITE # 212 (Lam Farms)

Sampling Group: Group 3 Sampling Frequency - Rotating Total / Irrigated Acres: 2.0 / 2.0 Sample site GPS location: N 34° 02' 36.5" W 118° 38' 47.8"

January 5, 2016, wet season, no sample collected



**Site Drainage** – The site is almost entirely flat and drains towards the center, and will most likely only discharge during flooding conditions. In that case, it would drain towards the south.

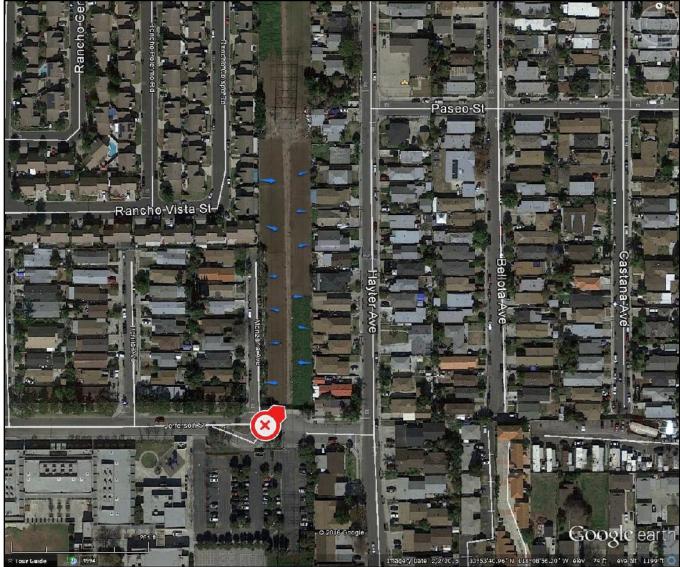
**Sampling** – One visit to date with no samples collected. This site was visited during the first wet season sampling event during this sampling year; no runoff was observed.

There are no historical sampling results for this site.

Aerial photography of the site is presented on Figure 20.

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Figure 20 – Aerial Photograph of NGA #212 and General Sampling Location





General Sampling Location



General Surface Flow to Sampling Location

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#### 7.0 SUMMARY OF SAMPLING SITE RESULTS

### 7.1 WATER QUALITY BENCHMARK EXCEENDANCES

A total of 74 samples have been collected since the inception of the program. During this sampling year, a total of two samples were collected over one sampling event. A second sampling event was not conducted, due to lack of sufficient precipitation.

For or 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 5. 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.

### 7.1.1 General Chemistry

Based on laboratory analytical results, WQBs were exceeded for one general chemistry constituents in samples collected at one of the two sites sampled during this sampling year (Year 5 under Order No. R4-2010-0186). Table 26 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 did not report TDS exceedances in any samples collected during this sampling period. Twenty-seven of the 74 total samples (36.5 %) collected throughout the life of the program have reported exceedances of TDS.

#### Chloride

Laboratory results did not report Chloride exceedances in any samples collected during this sampling period. Six of the 74 total samples (8.11 %) collected throughout the life of the program have reported exceedances of Chloride.

#### Sulfate

Laboratory results did not report Sulfate exceedances in any samples collected during this sampling period. Ten of the 74 total samples (13.5 %) collected throughout the life of the program have reported exceedances of Sulfate.

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#### Nutrients (Nitrate/Ammonia/Phosphorus)

Laboratory results reported Nitrogen as Nitrate exceedances in one of the two samples during this sampling period, and 41 of the 74 total samples (55.4 %) 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 74 total samples (5.41 %) collected throughout the life of the program have reported exceedances of Ammonia. WQBs for Phosphate have not been established.

						(	CWIL C	)rder #	^e R4-2005-008	0				
		YEA	AR 1			YEA	AR 2		YEA	AR 3	YEA	AR 4		% of
Constituent	Dry S	eason	Wet S	eason	Dry S	eason	Wet S	eason	Dry Season	Wet Season	Dry Season	Wet Season	Total	samples
	Event	Event	Event	Event	Event	Event		sampies						
	#1	#2	#1	#2	#1	#2	#1	#2	#1	#1	#1	#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	9	7	15	7	3	1	9	13	ns	ns	ns	ns	64	
Exceedances	9	'	15	'	3	1	,	15	115	115	115	115	04	
Average # of Exceedances	1.80	2.33	1.07	0.88	1.50	1.00	1.13	1.18	<b>n</b> 6	<b>n</b> 6		na	1.23	
per sample	1.60	2.55	1.07	0.88	1.50	1.00	1.15	1.10	ns	ns	ns	ns	1.25	
Number of Samples Collected	5	3	14	8	2	1	8	11	ns	ns	ns	ns	52	

Table 26 - Summary of Water Quality Exceedances, General Chemistry

ns Program suspended, no sample collected

								CWIL 0	rder #	R4-201	)-0186									
	Interim		YE	AR 1			YEAR	2		YEAR	3		YE	AR 4			YEAR	5		
Constituents	Sampling	Dry S	Season	Wet S	Season	Dry S	Season	Wet Season	Dry S	Season	Wet Season	Dry S	eason	Wet S	Season	Dry S	eason	Wet Season	Total	% of samples
	March 2011	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1	Event #1	Event #2	Event #1	Event #1	Event #2	Event #1	Event #2	Event #1	Event #2	Event #1		Ĩ
Ammonia	0			0	0						0			0	0			0	0	0.0%
TDS	3			1	1						2			1	0			0	8	36.4%
Sulfate	0			1	1						1			1	0			0	4	18.2%
Chloride	0			0	0						1			0	0			0	1	4.5%
Nitrogen	2			2	1						3			1	1			1	11	50.0%
Total Number of Exceedances	5	0	0	4	3	0	0	0	0	0	7	0	0	3	1	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	1	0	0	2	22	

-- No sample collected

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## 7.1.2 Pesticides

Based on laboratory analytical results, no WQBs were exceeded for pesticides in samples collected during this sampling year (Year 5 under Order No. R4-2010-0186). Table 27 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 two samples collected this sampling year. There have been 58 individual constituent exceedances in the 74 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 previous waiver period (CWIL Order #R4-2005-0080).

### **OP** Pesticides

Laboratory results did not report OP Pesticide exceedances in the two samples collected this sampling year. There have been 25 individual constituent exceedances in the 74 total samples collected throughout the life of the program.

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

#### **Pyrethroids**

Laboratory results did not report Pyrethroid Pesticide exceedances in the two samples collected this sampling year. There have been 91 individual constituent exceedances in the 74 total samples collected throughout the life of the program.

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	1	~					er # R4		0080					
		YEA	AR 1			YEA	AR 2		YEA	AR 3	YEA	AR 4		
Constituent	Dmy S	eason	Wet S	eason	Dry S	0000 <b>n</b>	Wet S	loocon	Dry	Wet	Dry	Wet	Total	% of
Constituent	_				•					Season	Season	Season	10141	samples
	Event				Event					Event	Event	Event		
	#1	#2	#1	#2	#1	#2	#1	#2	#1	#1	#1	#1		
				Wai	iver Lir	nitatio	ns							
OC Pesticides														
Clordane	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	
				Aquat	tic Life	Guidel	ines		( <b>-</b>		( <b>-</b>		() ()	
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	19				P				<b>I</b>		<b> </b>		ļ <b></b> ļ	
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	

Table 27 - Summary of Water Quality Exceedances, Pesticides
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ni Not included in laboratory analytical suite during this Waiver period

ns Program suspended, no sample collected

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								CWI	L Orde	r # R4-2	2010-0186									
	Interim		YE	AR 1			YE	AR 2		YE	AR 3		YE	AR 4			YEA	AR 5		
Constituents	Sampling	Dry S	eason	Wet S	leason	Dry S	Season	Wet Season	Dry S	leason	Wet Season	Dry S	eason	Wet S	Season	Dry S	eason	Wet Season	Total	% of samples
	March	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event	Event		<b>F</b>
	2011	#1	#2	#1	#2	#1	#2	#1	#1	#2	#1	#1	#2	#1	#2	#1	#2	#1		
								Waiver Lin	nitation	s						·			·	
OC Pesticides																				
Clordane	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	0	0	0	0	0	0	0	0	0	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	6	
								Aquatic Life	Guideli	nes										
OP Pesticides																				
Malathion	1			0	1						0			0	0			0	2	9.09%
ALB, OP Pesticide # of Exceedances	1			0	1						0			0	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)	-			ni	ni						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			1	1						3			3	0			0	10	
																				•
Total # of Exceedances	11			2	4						4			3	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 27 cont.- Summary of Water Quality Exceedances, Pesticides

ni Not included in laboratory analytical suite during this Waiver period

-- No samples collected

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# 7.1.3 Toxicity

Based on laboratory analytical results, toxicity was not significant enough to initiate a TIE in either of the two samples collected this sampling year. A total of 15 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.

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.

## 7.1.4 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 did not exceed Basin Plan objectives at any site sampled during the Waiver Period. 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.

# 7.2 QUALITY ASSURANCE AND QUALITY CONTROL

QA/QC of data collected during Year 5 under CWIL Order No. R4-2010-0186 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. Field blanks and equipment blanks collected by PacRL did not report any concentrations above laboratory MRLs, except for Heptachlor in the equipment blank, which was not detected in any other sample. 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. The precision of field duplicates were acceptable for all constituents this reporting period. 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.

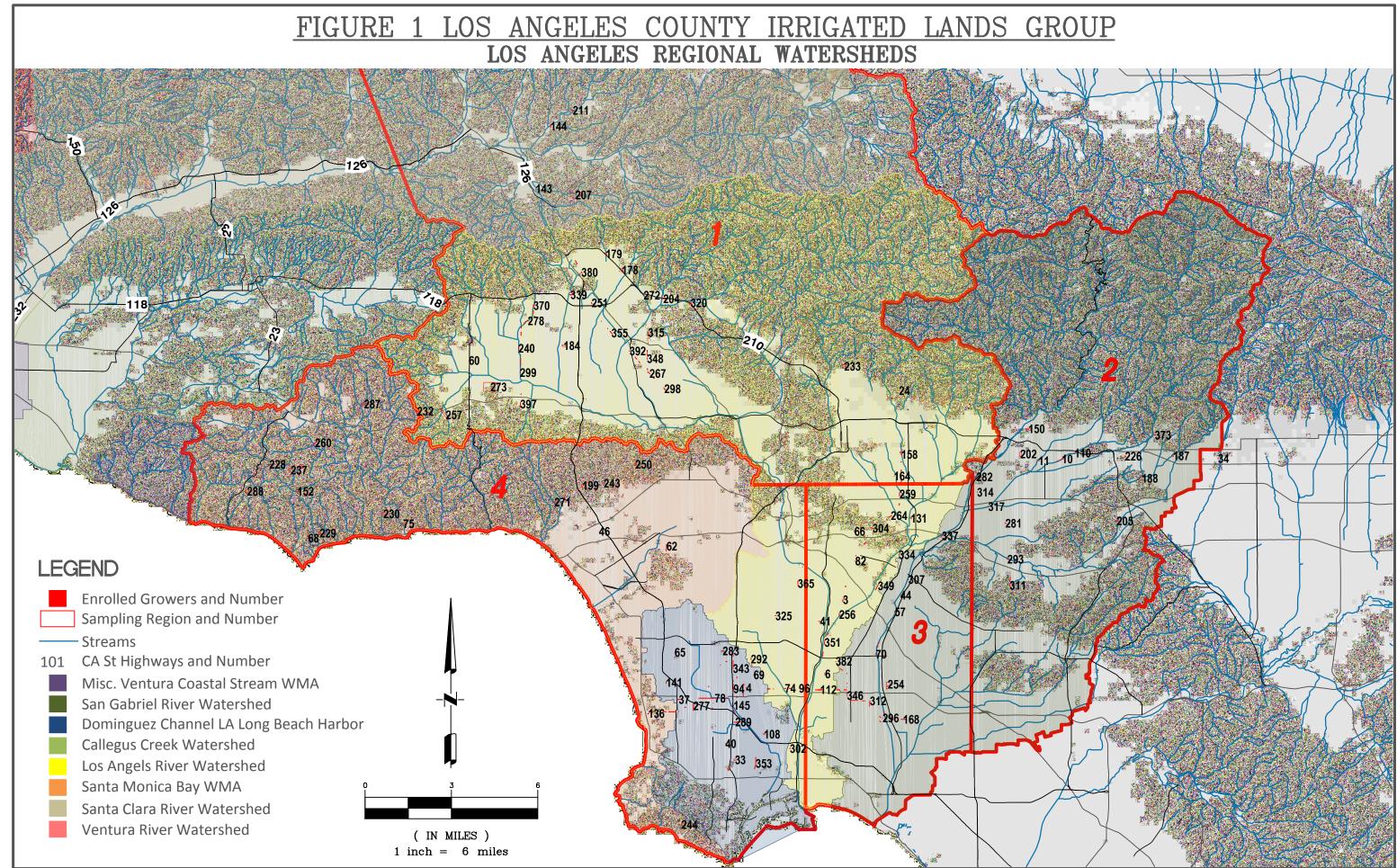
Percent recoveries for bank spike samples, laboratory control samples, and matrix spike samples are used to check the accuracy of samples. Some of these values fell outside the QAQC limits set in the QAPP, however, data was considered valid due to varying reasons, as discussed in the laboratory analytical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

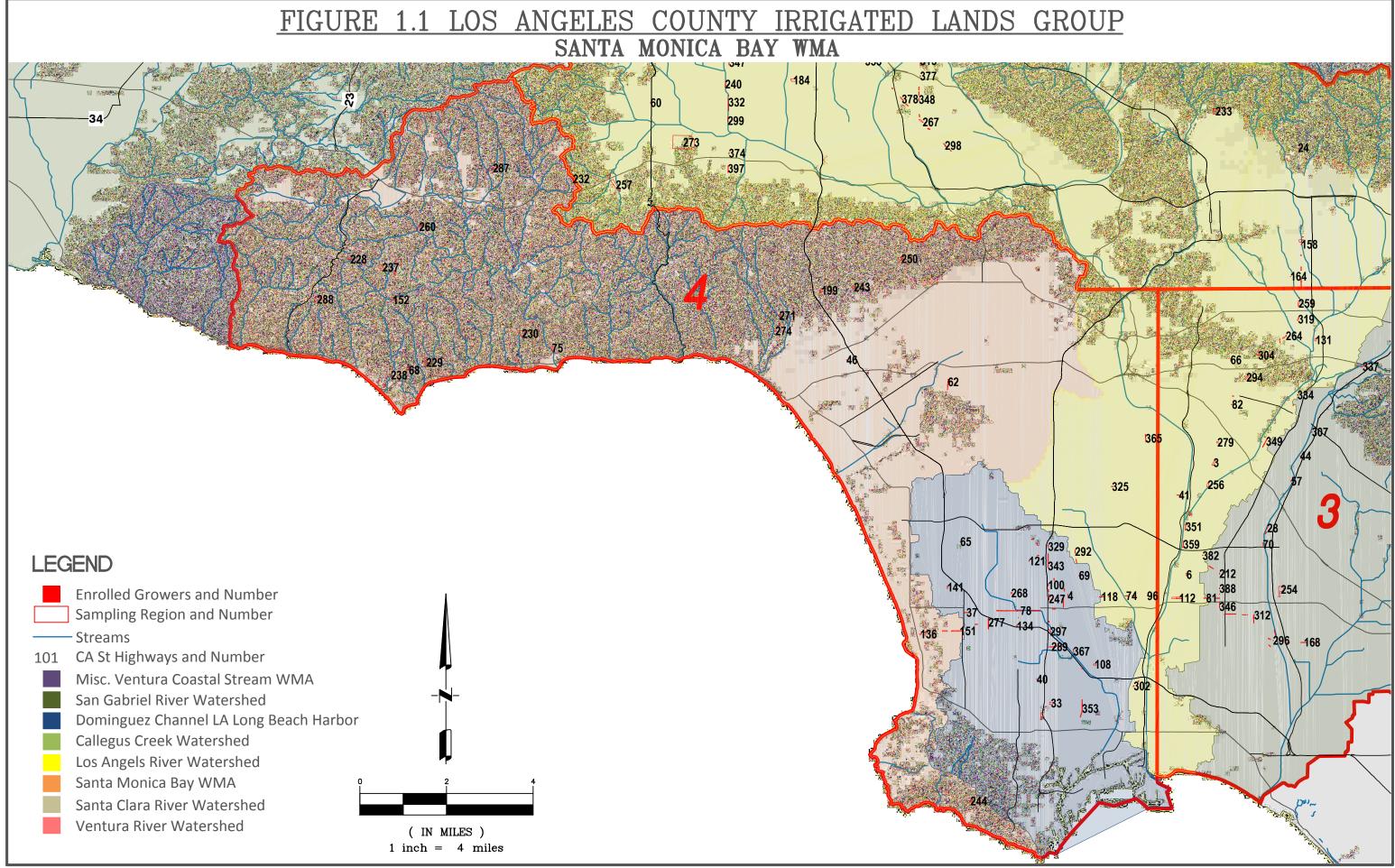
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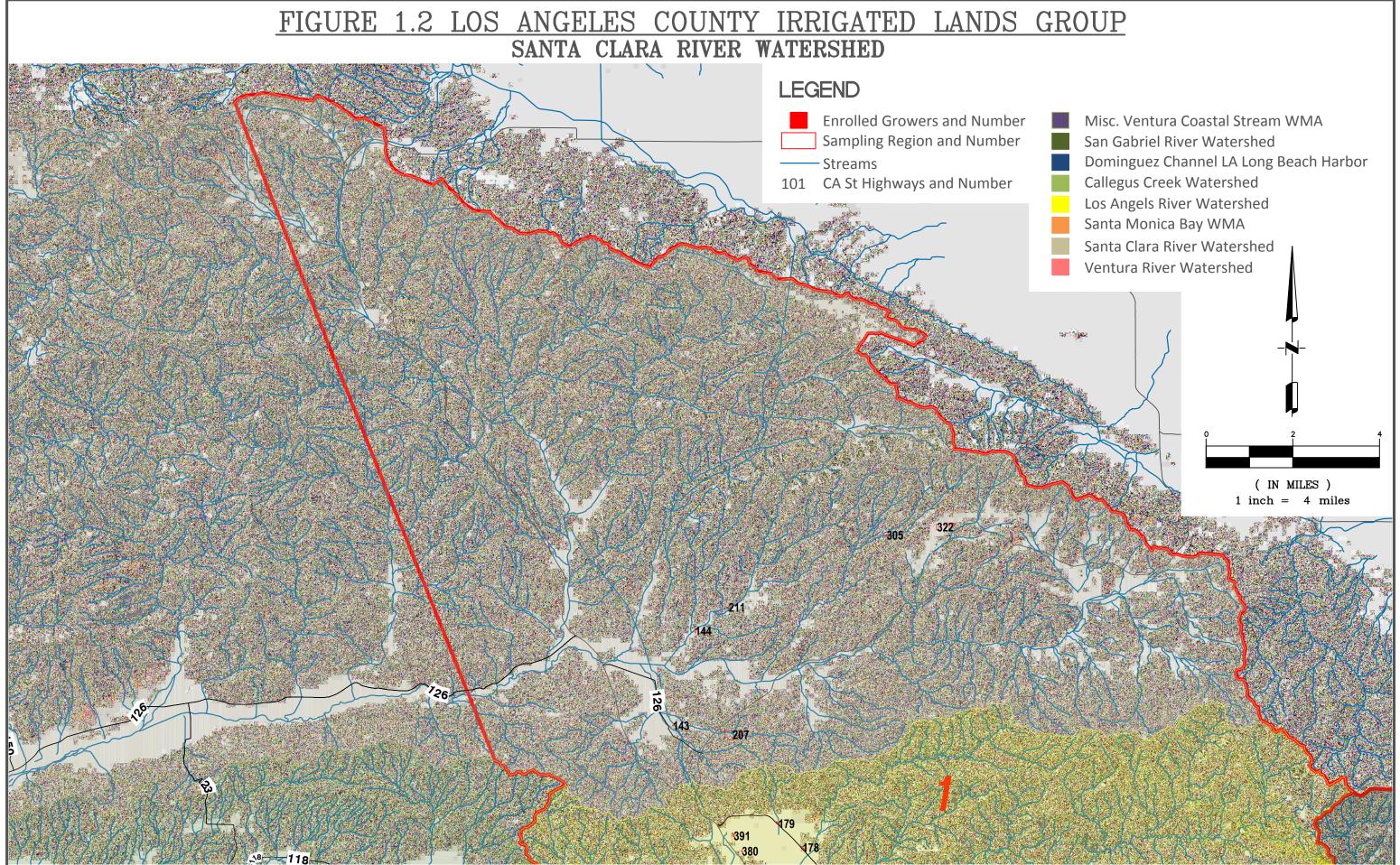
#### 8.0 DISCUSSION / CONCLUSION

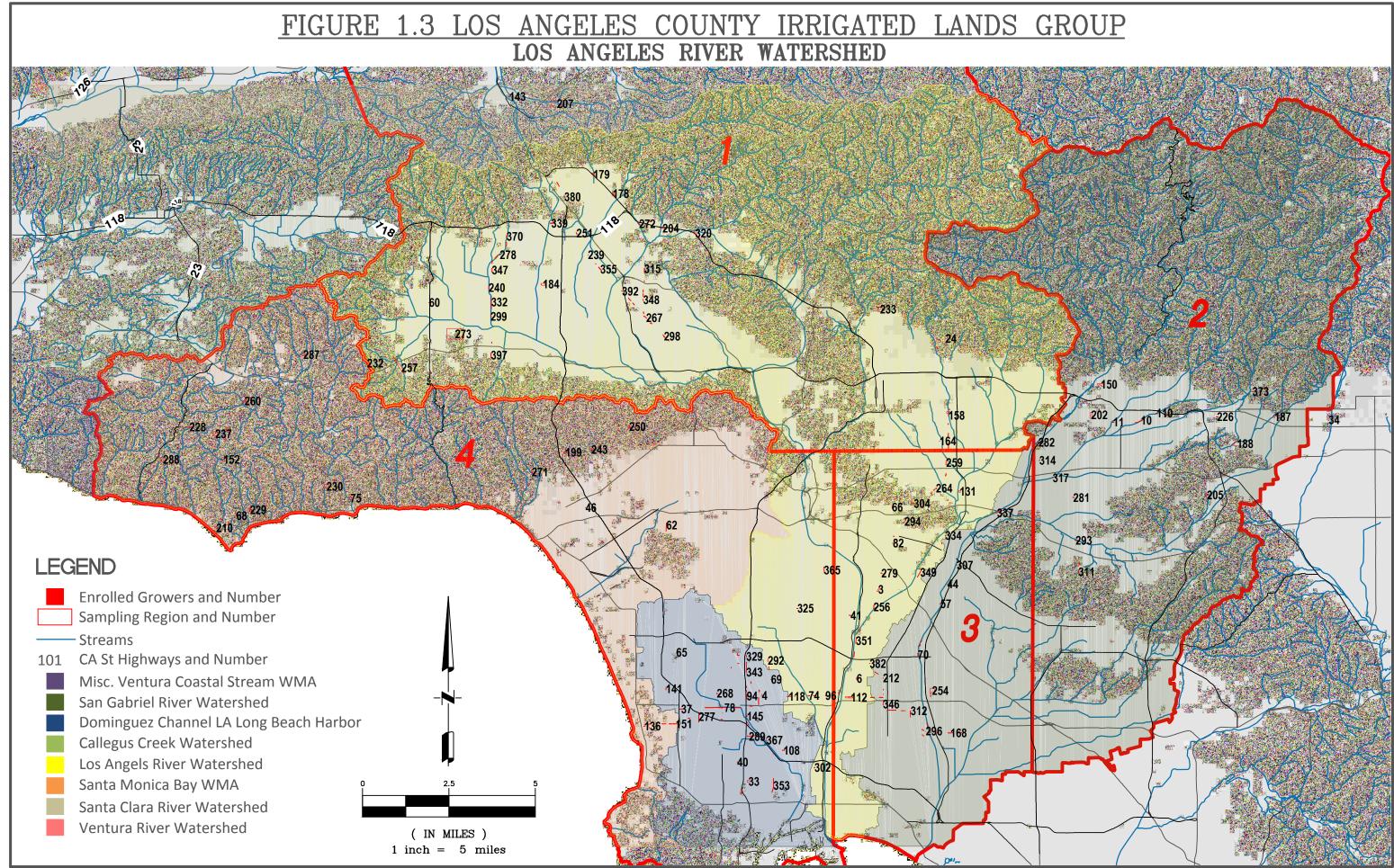
A total of two sampling event were conducted during the dry season of the first year of CWIL Order No. R4-2016-0143 and one sampling event was conducted during the wet season during the fifth year of CWIL Order No. R4-2010-0186. No runoff was observed or sampled during the dry season, and two of the five sites visited were sampled during the wet season.

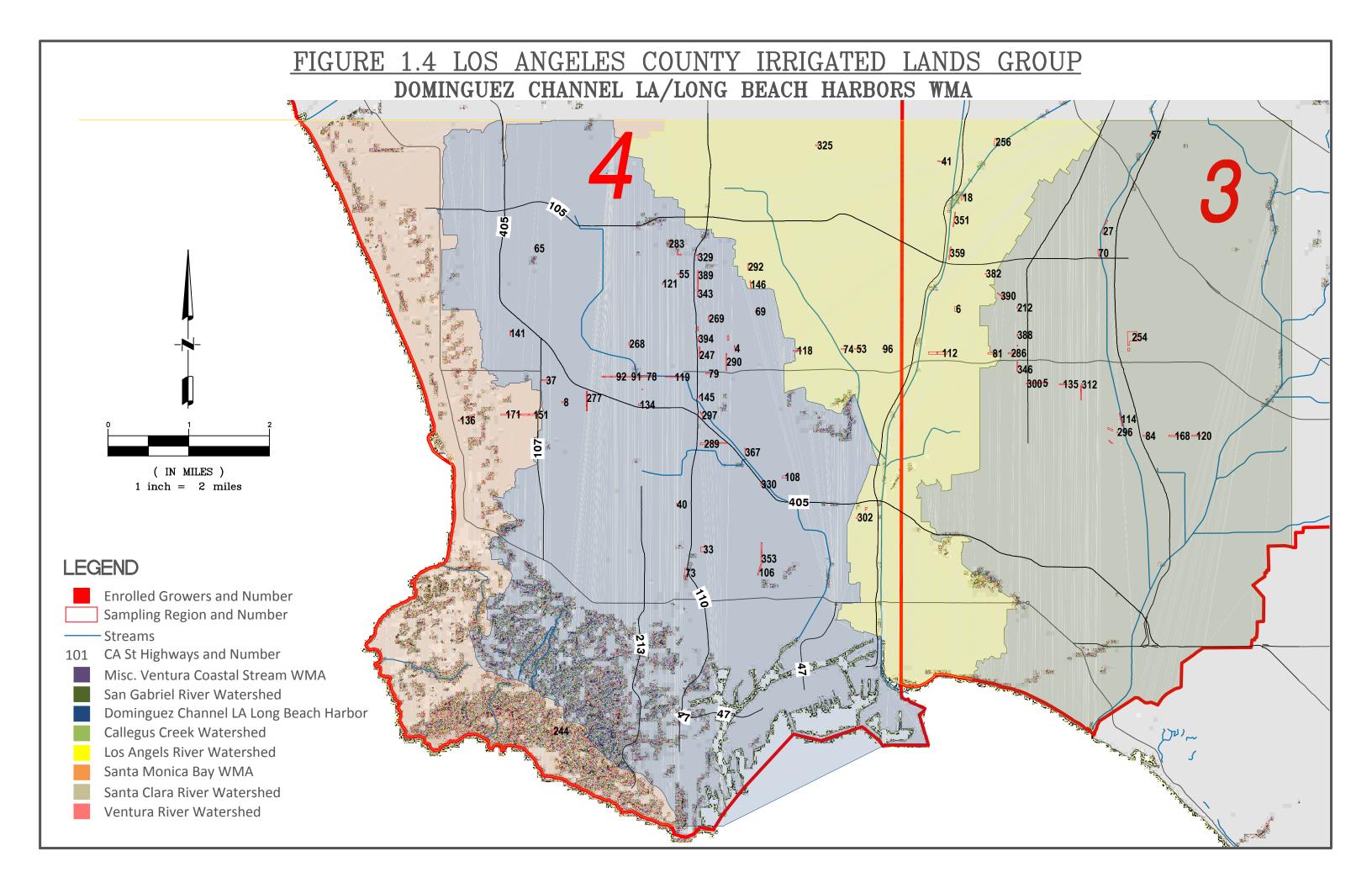
WQB exceedances was observed for Nitrogen in one of the collected samples. The LAILG will continue with the current WQMP and MRP until group information is gathered to prepare an updated MRP under Order R4-2016-0143.

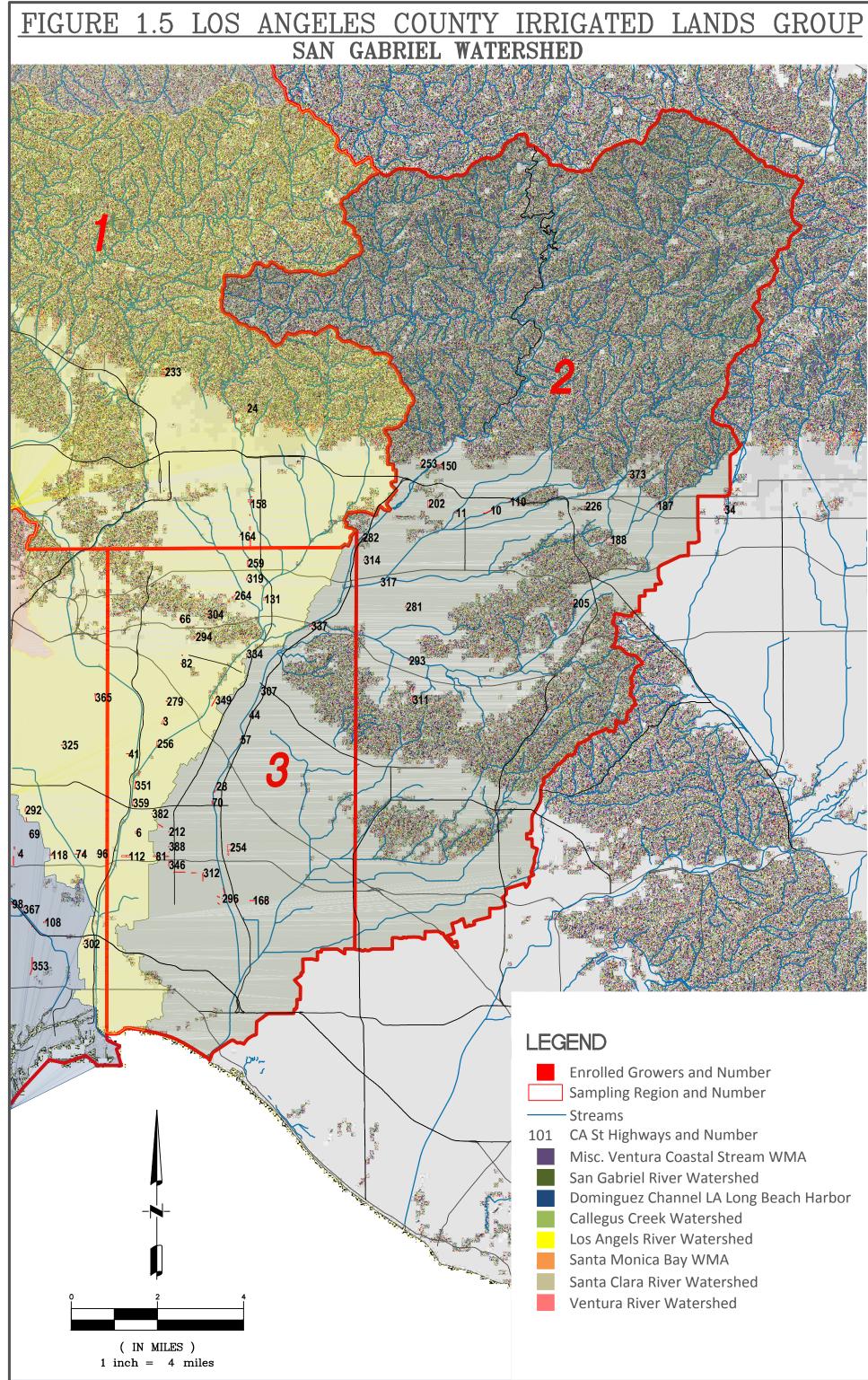












# **APPENDIX A**

# UPDATED LIST OF LOS ANGELES COUNTY IRRIGATED LANDS GROUP, AS OF DECEMBER, 2016

NGA	OWNER/ TENANT	<b>OPERATOR</b> /		PARCEL			MAILING			CROP TYPE	Waters	A	CREAGE
#	OWNEK/ IENANI	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP I I PE	hed	TOTAL	IRRIGATED
			2126001901	Sherman Way and Wilbur									
		Bartolo Lopez S.	2126014900	Ave.	Reseda	8427 Shirley Ave.	Reseda			IP	IP	1.8	1.8
324	90-90 Nursery	Jose Salazar	IP 7219001902	14667 Tupper St.	Panorama City	14667 Tupper St.	Panorama City	CA	91402	IP	IP	1	0.86
276	AJ Nursery, Inc.	Juan Ramos / Augustin Cazarez	7318001802 7318001801	1600 S. Wilmington Ave	Compton	1600 S. Wilmington Ave	Compton	CA	90220	GO	D	6.50	5.00
270	AJ INUISELY, IIIC.	Cazalez	6233003803	1000 S. Whilington Ave	Compton	1000 S. Willington Ave	Compton	CA	90220	00	D	0.30	5.00
			6233003802										
			6233003800										
			6232016801										
			6232016800										
			6232016802										
			6232017804										
	AY Nursery, Inc.	Hugo Ayon	6232017803	10115 South Garfield Ave		P. O. Box 4115	Riverside			GO	LA	4.5	3.50
206	A & R Nursery, Inc.	Adrian Lopez	5284023801	7950 Graves Ave	Rosemead	7950 Graves Ave	Rosemead	CA	91770	GO	LA	2.50	0.80
			6329001800										
			6329001801 6330019801		Bell								
3	ABC Nursery, Inc.	Eric Yonemura	6330019800	6800 Darwell Avenue	Gardens	424 East Gardena Blvd.	Gardena	CA	90248	GO	ТА	22.21	10.20
3	Abe Muisery, me.		6126011028	0000 Dai well Avenue	Gardens	424 East Galuella Divu.	Gardena	CA	90246	00	LA	22.21	10.20
			6126011029										
			6126011035										
			6126011036										
4	ABC Nursery, Inc.	Eric Yonemura	6126011800	424 E. Gardena Boulevard	Gardena	424 East Gardena Blvd.	Gardena	CA	90248	GO	D	19.19	11.51
			7168034800										
			7168034801										
			7168034281										
			7168034285 7168034270										
			7168034289										
			7168034289										
			7168034278										
			7168034272										
			7168034280										
			7168034273										
5	ABC Nursery, Inc.	Eric Yonemura	7168034274	6221 Clark Avenue	Lakewood	424 East Gardena Blvd.	Gardena	CA	90248	GO	SG	6.40	2.70
			6240008800										
			6240008801										
6	ABC Nursery, Inc.	Eric Yonemura	6240008802	7132 Somerset Boulevard	Paramount	424 East Gardena Blvd.	Gardena	CA	90248	GO	LA	9.52	4.87
			7049021800										
			7049021801										
			7049021802										
			7049021803										
7	ABC Nursony Inc.	Eric Vonomura	7049021802	20200 Studebalter	Corritos	121 Fast Cardona Plud	Gardana	CA	00249	GO	ТА	13.84	8 30
1	ABC Nursery, Inc.	Eric Yonemura	7049021800	20200 Studebaker	Cerritos	424 East Gardena Blvd.	Gardena	CA	90248	GO	LA	13.84	8.30

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	A	CREAGE
#	<b>OWNER/ TENANT</b>	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
													-
			4089009800,						1		1		
			4089016802,										
			4089016800,										
			4089011801,										
			4089011800,										
			4089010800,										
			4089009800										
			4089010800										
			4089011800										
			4089011801										
			4089017800										
			4089016802										
8	ABC Nursery, Inc.	Eric Yonemura	4089016800	18601 Yukon Avenue	Torrance	424 East Gardena Blvd.	Gardena	CA	90248	GO	D	21.97	10.20
	-	Marlene / Dimas Carbajal											
277	Abeja Nursery	Abeja	4089016802	18601 Ermanita Ave.	Torrance	18601 Ermanita Ave.	Torrance	CA	90504	GO	D	4.00	3.00
			8622022270										
			8622012271										
		Eddie Acosta / Carlos	8622013270										
9	Acosta Growers Inc.	Acosta	8622022006	5359 Citrus Ave	Azusa	18012 E. Alford St.	Azusa	CA	91702	GO	SG	3.00	2.25
		Eddie Acosta / Carlos	8630008274					~ .		~ ~	~~		
10	Acosta Growers Inc.	Acosta	8629002270 8620022270	1050 E Gladstone St	Azusa	18012 E. Alford St.	Azusa	CA	91702	GO	SG	7.00	5.25
			8620015270										
			8620015272										
			8620005271										
			8620024273										
			8620024272										
			8621025271										
			8621025270										
			8621015270										
			8621016272										
			8620015270										
			8620015272										
		Eddie Acosta / Carlos	8620022270										
11	Acosta Growers Inc.	Acosta	8620024272	669 S Azusa Ave	Azusa	18012 E. Alford St.	Azusa	CA	91702	GO	SG	10.00	7.50
		11005tu	3213014051	007 5712454 1110	T ILUGU	10012 E. Hilord St.	1 ILUGU		>1702		50	10.00	1.50
308	Agua Dulce Winery	Judy Kajama	?	9640 sierra highway	Agua Dulce	9640 Sierra Hwy	Agua Dulce	CA	91390	V	SC	75.00	62.00
	~ ~ ~		3214043017			Í				1		1	1
			3214043027										
			3214020064										
	Alonso Vineyard	Juan Alonso	3214020044	12625 Sierra Hwy	Santa Clarita	9124 E. Gallatin Rd.	Pico Rivera	CA	90660	V	IP	39.00	6.50
309	Alvarez Nursery	Elias Alvarez	2666003901	11362 Woodley Ave.	Granada Hills	IP	IP	CA	91344	GO	LA	6.19	5.00
	American Growers Plus,					18436 E. Section Center							
326		Nick A. Gomez	2103012901	18830 Strathem St.	Reseda	St.	Covina	CA	91722	IP	LA	1.05	1.05
207	American Sprinkler &	ID	ID	22420 F	XX7 . 11 1 X Y 11	22.420 E	Woodland		01277	Б	T . A	2.05	2.05
327	Cardanali Nursery	IP	IP 6049008278	23429 Erwin St.	Woodland Hills	23429 Erwin St.	Hills	CA	91367	IP	LA	2.05	2.05
			6049009282 6049009282										
			6049009282 6049018292										
236	Amigos Nursery, LLC	Sergio Vasquez	6049009285	1420 E. 92nd Street	Los Angeles	P.O. Box 927	Downey	CA	90241	GO	LA	9.00	7.00
230	Anngos muisery, LLC	sergio vasquez	0049009283	1420 E. 92110 Street	Los Angeles	1.U. DUX 921	Downey	CA	90241	00	LA	5.00	7.00

NGA	OWNER/ TENANT	OPERATOR/		PARCEL			MAILING			CROP TYPE	Waters	A	CREAGE
#	OWNER/ IENANI	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CKOP I I PE	hed	TOTAL	IRRIGATED
				South of the 405 Fwy &									
330	Amy's Garden	Amy Gonzales	7337005273	North of Carson St.	Carson	3650 Pine Ave.	Long Beach	CA	90807	IP	D	1.19	1.19
	Andres Ramirez Mendoza												
328	Nursery	Juan Ramirez	IP	14715 S. Vermont Ave.	Gardena	898 E. Deloras Dr	Carson	CA	90745	IP	D	3.01	3.01
				East of the 110 Freeway,									
220	Arnulfo Hernandez		6132003900	between 130th Stand	<b>T</b> A 1	DO D (00			000000	ID.	<b>T</b> A	1.00	1.60
329	Nursery	Lucilla Gil	6132004900	135th St, Los Angeles	Los Angeles	PO Box 609	Lawndale	CA	90260	IP	LA	4.60	4.60
				Southeast of the 60 Fwy									
337	Arturo Carbajal Nursery	Arturo Carbajal	8125001901	2	Whittier	1215 N. Stimson Ave.	La Puente	CA	91744	IP	SG	2.40	2.40
551			8207019801	and rooten of remision Ru.	,, interes		Hacienda	C/ 1	71/77			2.10	2.10
2	Ayon Nursery	Adriana Ayon - Jesus Ayon		16448 Haliburton Rd	Hacienda Heights	16448 Haliburton Rd	Heights	CA	91745	GO	SG	6.00	5.00
				28920 Bouquet Canyon		28920 Boquet Canyon	8				~ ~		
211	Barranquilla Nursery	Rosealina Malta	2812005016	Road	Saugus	Road	Saugus	CA	91390	GO	SC	2.50	2.00
				East of Wilbur Ave.									
	Ben-Chetrit,			between Blythe St. and									
332	Shimon/Ramy's Nursery	IP	2103015903	Elkwood St.	IP	5926 Calvin Ave.	Tarzana	CA	91356	IP	IP	3.60	3.60
244			520 4020001		<b>D</b> 1	<b>2</b> 201 IZ II			01770		<b>T</b> 4	1.00	0.50
264	Ben K Bonsai	Young Min / Edward Min	5284020801	2301 Kelburn Ave	Rosemead	2301 Kelburn Ave	Rosemead	CA	91770	GO	LA	1.00	0.50
	Bertha's Gardens/Western		2731024901										
278	Gardens	Paul Diehl	2729024901	18451 Lassen St.	Northridge	18451 Lassen St.	Northridge	CA	91325	GO	LA	2.50	2.50
		Billy Lee	IP	13213 Essex Pl.	Cerritos	6319 California St.	Long Beach	CA	90805	IP		2.84	2.84
	Bird of Paradise Nursery	Rogelio Garhlo	5272009277	4112 Paramount Blvd.	Pico Rivera	4112 Paramount Blvd.	Pico Rivera	CA	90660	IP		0.70	0.70
			2047001004										
			2047001001										
			2047001005										
			2047001002										
			2044020022										
			2047001001										
			2047001002										
10	Boething Treeland		2047001004		***		Woodland		010-5		<b>.</b> .	22.00	14.60
19	Farms, Inc.	Bruce Pherson	2047001005	23475 Long Valley Road	Woodland Hills	23475 Long Valley Road	Hills	CA	91367	GO	LA	32.00	14.68
75	Bridgeman Ranch	Jackie Bridgeman / Bob Tobias (Main contact)	4452014006	3415 Cross Creek Rd	Malibu	3415 Crosscreek Rd.	Malibu	CA	90265		SM	5.00	3.00
	C & S Nursery, Inc.	Santiago Rosales II	5025006900	3615 Hauser Bl	Los Angeles	P.O. Box 642179	Los Angeles			0 GO		2.50	2.00
200		Armida Torres or Norma	5025000700	1400 West Greenleaf	LUS Aligeles	1.0. DUA 0 <del>1</del> 21/7	LUS Aligeles		20004			2.30	2.00
118	C Stars Nursery, Inc.	Gonzales	7319002806	Boulevard	Compton	P O Box 342	Gardena	CA	90247	С	р	4.50	2.50
110	c sturb i turbery, inc.	Armida Torres or Norma	1017002000	17654 South Normandie		I 0 D0A 0 12	Surdenti	011	JU2T/	Ť			2.50
110	C Stars Nursery, Inc.	Gonzales	6111023800	Avenue	Gardena	P O Box 342	Gardena	CA	90247	С	D	8.00	4.00

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	Α	CREAGE
#	OWNER/ TENANT	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
					_			1					
			2647023903					1					
			2644002905										
			2644002904										
			2644002900										
			2644004900										
			2644004902										
			2644004903										
			2644004901										
			2647025902										
			2647025901										
239	California Nurseries	Jose Gutierrez	2647025900	14301 Van Nuys Blvd	Arleta	P.O. Box 2778	North Hills	CA	91393	GO	LA	7.50	7.50
240	California Nurseries	Jose Gutierrez	2784009902	18955 Roscoe Blvd	Northridge	P.O. Box 2778	North Hills	CA	91393	GO	LA	1.50	1.50
			8709023908										
	California State	Duncan McKee/Dave	8709023907										
205	Polytechnic University	Matias	8709023910	3801 W. Temple	Pomona	3801 W. Temple Ave.	Pomona	CA	91768	M	SG	1,200.00	336.00
24	Calscape Growers	Chester (Dan) Robinson	5860004004 2317019900	2103 Villa Heights Rd	Pasadena	2103 Villa Heights Rd	Pasadena	CA	91104	GO	LA	0.25	0.20
			2317019900										
			2317018900										
			2317017900										
26	Canyon Way Nursery	Mark Wurzel	2317018900	11745 Sherman Way	North Hollywood	3214 Oakdell Road	Studio City	СА	91604	GO	LA	4.98	4.25
20	Carlos Mejia Nursery C&Y		2317017700	11745 Sherman Way	I torui Hony wood	5214 Oakden Road	Studio City	CA	71004	00		4.90	T.23
335	Nursery	Carlos Mejia	2310008900	11811 Strathern St.	North Hollywood	11811 Strathern St.	North Hollywood	CA	91605	IP	LA	3.00	3.00
000	1 (01001)		5277023802		1.0101110119.000				,1000			2100	
			5277023803										
		Guadalupe Carreon /	5277023804										
50	Carreon Nursery	Adriana Carreon	5277023805	7900 La Merced Road	Rosemead	472 Giano Avenue	La Puente	CA	91744	GO	LA	6.00	6.00
			6332018818										
			6332018815										
			6332018809										
279	Castaneda Nursery	Salud Castaneda	6332018811	6270 Slauson Ave	Commerce	11500 Blanding St.	Whittier	CA	90606	GO	LA	8.50	5.00
			5263037804										
			5263037801										
• • • •			5263037802						00.00.0		<b>.</b> .	<b>-</b> 00	4.00
280	Castaneda Nursery	Salud Castaneda Jose Centeno / Rene	5263037805	1690 Isabella Ave.	Monterey Park	11500 Blanding St.	Whittier	CA	90606	GO	LA	5.00	4.00
78	Centeno's Nursery &		6106013800	17600 S. Western Ave	Gardena	17514 S. Figueroa St.	Gardena	CA	90248	GO	D	4.39	2 00
/8	Landscaping	Centeno	7339006800	17600 S. Western Ave	Gardena	17514 S. Figueroa St.	Gardena	CA	90248	60	D	4.39	3.00
			7339002803										
			7339003801										
	Centeno's Nursery &	Jose Centeno / Rene	7339003800										
79	Landscaping	Centeno	7339007802	17514 S. Figueroa Street	Gardena	17514 S. Figueroa St.	Gardena	CA	90248	GO	D	7.70	6.00
-	Centeno's Nursery &	Jose Centeno / Rene		6		6		1	-		1		
81	Landscaping	Centeno	7113014800	6850 N. Paramount Blvd	Long Beach	17514 S. Figueroa St.	Gardena	CA	90248	GO	SG	4.70	3.00
			7339008913										
	Centeno's Nursery &	Jose Centeno / Rene	7339008911										
145	Landscaping	Centeno	7339007901	565 W. 189th Street	Gardena	17514 S. Figueroa St.	Gardena	CA	90248	GO	D	4.67	3.00
		Jose de Jesus Gallo / Maria											
84	Cerritos Growers	Silva	7050005801	19805 Gridley Rd	Cerritos	4943 Buffington Rd	El Monte	CA	91732	GO	SG	3.5	3.00
10.2		<b>.</b>	<b>2</b> 0 <b>2</b> (01 <b>2</b> 000)	19820 Norwalk		10000.11						4.50	
120	Cerritos Nursery, LLC	Ken Zhang/Bailey Yang	7056013800	Blvd	Cerritos	19820 Norwalk Blvd.	Cerritos	CA	90703	GO	SG	4.50	4.50

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	A	CREAGE
#	OWNER/ TENANT	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
		•									_		
			8021020800										
			8021008806										
			8021008802										
	Certified Plant Growers,		8021008801	10400 Downey/Norwalk									
27	Inc.	Tom Miesen	8021008902	Rd	Norwalk	P.O. Box 1696	Temecula	CA	92593	С	SG	10.00	6.50
			8021005915										
			8021004801										
	Certified Plant Growers,		8021004800 8021004805										
28	-	Tom Miesen	8021004803	10524 E Firestone Blvd	Norwalk	P.O. Box 1696	Temecula	CA	92593	C	SG	2.50	1.50
28	Inc.	Scott Rich	8021004804	10324 E Filestolle Blvd	INOIWAIK	F.O. DOX 1090	Temecula	CA	92393	C	30	2.30	1.50
243	Chartwell Estate Vineyard		4362016008	750 Bel Air Rd	Los Angeles	750 Bel Air Rd	Los Angeles	CA	90077	V	SM	1.50	1.00
243	Chartwen Estate vineyard	Jiii Duitows	6106019064		Los migeres		Los Migeles	CIT	20077	•	5101	1.50	1.00
	Chikugo-En Bonsai		6106019063			18110 S Western							
265	Nursery	Gary Ishii	6106019062	18110 S Western Ave	Gardena	Ave	Gardena	CA	90248	М	D	1.00	0.75
			8392014036										
		Richard Matsushita	8392014035	724 N. Cataract Avenue	San Dimas	724 N. Cataract Ave	San Dimas	CA	91773	F		3.80	1.70
304	Chuy's Nursery	Jesus Martinez	5265001808	1996 S. Orange Ave	Monterey Park	9124 E. Gallatin Rd.	Pico Rivera	CA	90660	GO	LA	3.00	2.00
			4464008045										
			4464008019 4464008044	31424 Mulholland		31424 Mulholland							
210	Cielo Farms Vineyard	Richard Hirsh	4464008032	Highway	Malibu	Highway	Malibu	CA	90265	v	ТА	18.00	3.00
218	Cielo Farms Vineyard	Richard Hirsh	4404008032	Highway	Manbu	Highway	Mandu	CA	90265	v	LA	18.00	3.00
244	Clark Vineyard	Chris Shaver / Dave Clark	7567010026	11 Packsaddle Rd East	Rolling\ Hills	220 Avenue I East	Redondo Beach	CA	90274	v	SM	0.90	0.50
	Classic Landscaping &		2127014006										
338	Nursery	Sam Mozes	?	18756 Erwin St.	Tarzana	18756 Erwin St.	Tarzana	CA	91335	IP	LA	6.88	6.88
			7330007906										
			7330008902										
			7330009901 7330009904										
			7330009904										
			7330009909										
			7330009909										
			7330009908										
			7330009907										
			7330009905										
	C Spot		7330009903										
33	Nurseries, Inc.	Dixon Suzuki	7330009911	321 W. Sepulveda Blvd	Carson	321 W Sepulveda Blvd.	Carson	CA	90745	С	D	32.00	18.50
	Cama Wholesale												
150	Nursery	Richard Wilson	8617001029	1025 N. Todd Ave.	Azusa	1025 N Todd Avenue	Azusa	CA	91702	С	SG	26.00	15.30
34	Corey Nursery Co.	Jeff Corey	8307002032	1650 Monte Vista Avenue	Claramont	P. O. Box 609	Claremont	CA	91711	GO	S A	6.80	3.00
34	Corey Nursery Co. Cyclamen Growers	Jeff Colley	2530003017	1050 Wonte vista Avenue		r. U. DUX 009	Claremont	CA	91/11	00	SA	0.00	5.00
35	Inc.(dba C Grows)	Tomoko Copon	2530003017	11545 Kagel Canyon St	Sylmar	11545 Kagel Canyon St.	Sylmar	CA	91342	GO	LA	3.54	2.60
55			6351036800		~	rie is mager canyon bt.	~ j mui		/10/12				
			6351036801										
			6351036802										
			6351036803										
		Julian Damas / Yuniva	6351036804										
	Damas Nursery	Pierce	6351036805	6265 E. Hereford Dr.	E. Los Angeles	8210 Passons Blvd	Pico Rivera	CA	90660	GO		7.00	5.00
400	Dan Needham Nursery	Dan Needham	IP	11617 Dehougne St.	Lakewood	11617 Dehougne St.	Lakewood	CA		IP	IP		

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	A	CREAGE
#	OWNER/ TENANT	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
		00111101				112211200	0111					101112	
340	David's Nursery	David Martinez	7315037271	909 E. Sepulveda Blvd.	Carson 90745	503 Pacific St.	Carson	CA	90745	IP	D	3.10	3.10
340	David S Ivuisci y		7515057271	28367 San Canyon Rd.		28367 San Canyon Rd.	Carson	CA	90743	11	D	5.10	5.10
398	David Garcia Nursery	David Garcia	IP	Spc 66	Canyon Country	Spc 66	Canyon Country	СА	91387	IP	IP	0.35	0.35
570	David Galeia Hulsery	David Galeia					Callyon Country	CA	71507	11		0.55	0.55
339	Daniel Velazquez Nursery	Daniel Velazquez	2666003901	11263 Woodley Ave.	Granada Hills	11208 Degarmo Ave.	Pacoima	CA	91331	IP	LA	1.64	1.64
	Eden Nursery	Trinindad Alcaraz	2000003701	11600 Berendo Ave.	Gardena	11612 Culver Blvd.		CA	90066	IP	D	1.40	1.40
341	Lach runsery		2642022902		Gardena	11012 Culver Divu.	Los migeres	CII	20000	11		1.40	1.40
342	El Bajio Nursery	Benancio Queme	2625025900	13760 Sunburst St. Areleta	Arleta	9314 Woodman Ave.	Arleta	СА	91331	IP	LA	1.64	1.64
	El Castillo Nursery	Juan Aguilar	6119006900	555 W. 146th St.	Gardena	8009 Rose St.	Paramount	CA		IP	D	1.55	1.55
515		buun rigunur	011)000)00	Southwest of San	Gurdona	0009 1050 50	Turumount	0.11	20123	n	5	1.00	1.00
				Fernando Rd and North									
360	El Dorado Nursery	Eugenia Torres	IP	East of Telfair Ave.	San Fernando	PO Box 16926	North Hollywood	СА	91615	IP	LA	1.96	1.96
			8533010909										
			8619002903										
202	El Nativo Growers, Inc.	James Campbell	8533012908	200 S. Peckham	Azusa	200 South Peckham Rd.	Azusa	CA	91702	GO	SG	9.00	7.00
246	Elliott Dolin	Elliott Dolin	4467018045	5970 Cavalleri Rd	Malibu	5970 Cavalleri Rd	Malibu	CA	90265	V	SM	1.80	0.50
-							Palos Verdes	-					
344	Environmental Arts	Peter Lee	IP	North Side of 152nd St.	Gardena	PO Box 157	Estates	CA	90247	IP	D	1.10	1.10
		Esequiel Hernandez/ Perla											
41	Esequiel Nursery	Hernandez	6222005273	9000 Atlantic Ave	South Gate	9000 Atlantic Ave.	South Gate	CA	90280	GO	LA	2.5	1.50
146	Estanfor Nursery	Rafael Rangel	6134039270	1130 Stanford Ave	Compton	1017 E. 150th Street	Compton	CA	90220	GO	D	1.90	1.25
		_			_								
345	Exotic Garden Nursery	Jimmy King	2127021900	18801 Victory Blvd.	Reseda	18801 Victory Blvd.	Reseda	CA	91335	IP	LA	2.35	2.35
346	F&A Nursery	Francisco Garcia	7162014270	8650 Artesia Blvd.	Bellflower 90706	13213 Curtis and King Rd.	Norwalk	CA	90650	IP	LA	1.32	1.32
				East of Crider Ave,									
				between Washington Blvd									
			6369003273	and the railroad tracks,									
349	Francisco Garcia Nursery	Francisco Garcia	6369005900	Pico Rivera	Norwalk	13213 Curtis and King Rd.	Norwalk	CA	90650	IP	LA	2.40	2.40
			4261037001										
			4261037005										
			4261037006										
			4261037007										
			4261037004										
46	F K Nursery, Inc.	Eric Kageyama	4261037008	2027 Colby Ave	Los Angeles	2027 Colby Avenue	Los Angeles	CA	90025	GO	SM	1.46	0.92
		Reuben Martinez / Liz	8471002804	14855 Fairgrove									
281	Fairgrove Nursery	Martinez	8471002805	Ave	La Puente	14826 Fairgrove Ave	La Puente	CA	91744	GO	SG	2.50	2.00
10		Fausto Garcia / Eduardo	7165020270						0.0 4 7 0	<b>G</b> 0		- 00	4.00
42	Fausto's Nursery	Garcia	7165020800	5759 Allington St	Lakewood	15317 McRae St.	Norwalk	CA	90650	GO	SG	5.00	4.00
				West of Morella Ave									
240			2210022001	between Arminta St. and	T A 1	1214 0 01 1 4	G (	C.	00000	ID	T 4	1 (0	1.60
548	Felix Garcia Nursery	Felix Garcia	2310023901	Stagg St. Los Angeles	Los Angeles	1314 S. Cliveden Ave.	Compton	CA	90020	IP	LA	1.68	1.68
247	Four Seasons Wholesale	Dan LaFlaur	2763021900	19940 North CC St	N a with what a s	1990 Cincles D 1	Cimi Mall		02065	п	ТА	10.75	10.75
347	Nursery	Dan LaFleur	2770001900	18840 Nordhoff St.	Northridge	1880 Sinaloa Rd. 11862 Balboa Blvd, PMB	Simi Valley	CA	93065	IP	LA	12.75	12.75
247	Eulen Dongei Margare	Juon Duner	6121003902 6121002901	560 W 1004 04	Condorra		Grenada	C A	01244	CO	Б	2 20	1 75
247	Fuku Bonsai Nursery	Juan Duran	8535020902	560 W. 168th St.	Gardena	164	Hills	CA	91344	GO	D	2.20	1.75
			8535020902 8535020801										
202	Garden View Inc.	Julie Meahl	8535020801	12001 Louver Armso D.J	Impindolo	114 E. Railroad Ave	Monrovia	CA	01016	CO	Б	10.00	5.00
				12901 Lower Azusa Rd	Irwindale		Monrovia	CA		GO GO	IP IP	10.00	5.00
283	Gardena Hills Nursery	Gilberto Lopez	6089023282	12597 S Budlong Ave	Los Angeles	2579 E. 219 St.	Long Beach	CA	90810	UU	Ir	1.75	1.25

MOWNER/ TENAN         94       Gardena Nursery & Landscape Maintenance         300       Garibaldo's Nursery         300       Garibaldo's Nursery         350       Gil Hernandez Nursery         350       Gil Hernandez Nursery         266       Girasol Nursery         110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez       Plant Growers/Gomez         180       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser	OPERATOR/		PARCEL			MAILING				Waters	s A	CREAGE
94Landscape Maintenance300Garibaldo's Nursery350Gil Hernandez Nursery350Gil Hernandez Nursery266Girasol Nursery110Glendora Gardens207Golden Oak Ranch351Gomez Calderon Nurser351Gomez Growers (United Plant Growers/Gomez180Growers)352Grace Farms353Grace Farms354Green Effects Inc. Green House Nurseries, 355143Green Landscape Nurser144Green Landscape Nurser	ANT CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	<b>CROP TYPE</b>	hed	TOTAL	IRRIGATED
94Landscape Maintenance300Garibaldo's Nursery350Gil Hernandez Nursery350Gil Hernandez Nursery266Girasol Nursery110Glendora Gardens207Golden Oak Ranch351Gomez Calderon Nurser351Gomez Growers (United Plant Growers/Gomez180Growers)352Grace Farms353Grace Farms354Green Effects Inc. Green House Nurseries, 355143Green Landscape Nurser144Green Landscape Nurser							~	<u> </u>				
94Landscape Maintenance300Garibaldo's Nursery350Gil Hernandez Nursery350Gil Hernandez Nursery266Girasol Nursery110Glendora Gardens207Golden Oak Ranch351Gomez Calderon Nurser351Gomez Growers (United Plant Growers/Gomez180Growers)352Grace Farms353Grace Farms354Green Effects Inc. Green House Nurseries, 355143Green Landscape Nurser144Green Landscape Nurser								1				
300       Garibaldo's Nursery         350       Gil Hernandez Nursery         350       Gil Hernandez Nursery         266       Girasol Nursery         110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez       180         Growers)       Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser		6121004901	551 W. 168th Street	Gardena	551 W. 168th St.	Gardena	CA	90248	GO	D	1.60	1.60
350       Gil Hernandez Nursery         266       Girasol Nursery         110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       Green Landscape Nurser         143       Green Landscape Nurser		7160003801						, 02.10			1.00	1100
350       Gil Hernandez Nursery         266       Girasol Nursery         110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       Green Landscape Nurser         143       Green Landscape Nurser		7160003800										
350       Gil Hernandez Nursery         266       Girasol Nursery         110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       Green Landscape Nurser         143       Green Landscape Nurser		7162007800										
266       Girasol Nursery         110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers)       Gomez Growers (United Plant Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         355       Inc.         143       Green Landscape Nurser	Filemon Garibaldo	7162007801	8834 Rose St.	Bellflower	8834 Rose St.	Bellflower	CA	90706	GO	LA	1.80	1
266       Girasol Nursery         110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers)       Gomez Growers (United Plant Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         355       Inc.         143       Green Landscape Nurser			South of El Segundo Blvd									
266       Girasol Nursery         110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers)       Gomez Growers (United Plant Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         355       Inc.         143       Green Landscape Nurser			and West of Vermont St,									
110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser	ery Gil Hernandez	6115039270	Gardena	Gardena	10607 San Antonio Ave.	South Gate	CA	90280	IP	D	2.60	2.6
110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser		6373016270										
110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser		6373017272										
110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser		6373021270										
110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser		6373016906										
110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser		5272031274										
110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser		5272032271 5272005271										
110       Glendora Gardens         207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       355         143       Green Landscape Nurser         144       Green Landscape Nurser	Angela Montoya	5272005271	9555 Samaa St	Pico Rivera	PO Box 6862	Pico Rivera	CA	90661	GO	ТА	9.00	2.50
207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United         Plant Growers)         Gomez Growers (United         Plant Growers)         Gomez Growers (United         Plant Growers)         352         Grace Farms         353         Green Effects Inc.         Green House Nurseries,         355         Inc.         143         Green Landscape Nurser	Angela Montoya	8641001274	8555 Spruce St	PICO RIVEIa	PO B0X 0802	Pico Rivera	CA	90001	60	LA	9.00	2.50
207       Golden Oak Ranch         351       Gomez Calderon Nurser         Gomez Growers (United         Plant Growers)         Gomez Growers (United         Plant Growers)         Gomez Growers (United         Plant Growers)         352         Grace Farms         353         Green Effects Inc.         Green House Nurseries,         355         Inc.         143         Green Landscape Nurser	Melina Serrandino	8641001273	1135 S Grand Avenue	Glendora	1132 S. Grand Avenue	Glendora	CA	91740	м	SG	4.36	3.75
351       Gomez Calderon Nurser         Gomez Growers (United         Plant Growers)         Gomez Growers (United         Plant Growers)         352         Grace Farms         353         Green Effects Inc.         Green House Nurseries,         355         143         Green Landscape Nurser		0041001275	19802 Placerita Canyon	Glendora	19802 Placerita Canyon	Gleildora	CIT	71740	111	50	4.50	5.15
351       Gomez Calderon Nurser         Gomez Growers (United         Plant Growers)         Gomez Growers (United         Plant Growers)         352         Grace Farms         353         Green Effects Inc.         Green House Nurseries,         355         143         Green Landscape Nurser	Steve Sligh	2848010020	Rd	Newhall	Rd	Newhall	CA	91321	М	SC	890.00	200.00
Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser												
Gomez Growers (United Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser			South of Imperial Hwy and	1	9956 Downey and Sanford							
180       Plant Growers/Gomez         180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser	Irsery Gomez Calderon	6234011274	North Gardendale St.	South Gate	Bridge Rd.	Downey	CA	90240	IP	LA	3.80	3.80
180       Growers)         Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser	nited											
Gomez Growers (United Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser		7311013800										
Plant Growers/Gomez         296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser	Jose Gomez	7311017800	3698 Caspian Avenue	Long Beach	3698 Caspian Avenue	Long Beach	CA	90810	С	LA	8.10	7.30
296       Growers)         352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser												
352       Grace Farms         353       Grace Farms         354       Green Effects Inc.         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser		7048015801										
353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser	Jose Gomez	7048015802	5150 Knoxville Ave	Lakewood	3698 Caspian Avenue	Long Beach	CA	90810	С	SG	3.50	2.00
353       Grace Farms         354       Green Effects Inc.         Green House Nurseries,       Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser		7404002270	Intersection of Bonita St.	C	012 W 11/1 St #1	C D. 1		00721	ID	D	0.90	0.89
354       Green Effects Inc.         Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser	Myong H. Koches	7404003278	and E. Pacific St. Realty St. and Delores Dr.	Carson	912 W. 11th St. #1	San Pedro	CA	90731	IP	D	0.89	0.89
354       Green Effects Inc.         Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser			(intersecting Wilmington									
354       Green Effects Inc.         Green House Nurseries,         355       Inc.         143       Green Landscape Nurser         144       Green Landscape Nurser	Yung L. Lee	7404004273	Ave.)	Carson	912 W. 11th St. #1	San Pedro	CA	90731	IP	D	1.62	1.62
Green House Nurseries, 355 Inc. 143 Green Landscape Nurser 144 Green Landscape Nurser		7707007273	North of Vose St. between		γ12 W. 11tH βt. π1			70751			1.02	1.02
Green House Nurseries, 355 Inc. 143 Green Landscape Nurser 144 Green Landscape Nurser			Radford Ave. and									
Green House Nurseries, 355 Inc. 143 Green Landscape Nurser 144 Green Landscape Nurser	IP	2321004901	Lankershim Blvd.	Los Angeles	4248 Hilburn Ct.	Moorepark	CA	93021	IP	LA	4.10	4.10
143     Green Landscape Nurser       144     Green Landscape Nurser				0		1						
143     Green Landscape Nurser       144     Green Landscape Nurser	Mark Whitten	2642021900	9400 Canterbury Ave.	Arleta	9400 Canterbury Ave.	Arleta	CA	91331	IP	LA	3.48	3.48
144 Green Landscape Nurse		2833001087	22216 1/2 Placerita		26191 Bouquet Canyon							
	ursery Richard Green	2833004097	Canyon Rd	Santa Clarita	Rd.	Saugus	CA	91350	GO	SC	4.50	4.00
					26191 Bouquet Canyon							
14 Green Leaf Nursery	ursery Richard Green	2809003270	Rosedel Street	Saugus	Rd.	Saugus	CA	91350	GO	SC	4.00	2.00
44 Green Leaf Nursery		8177001802										
44 Green Leaf Nursery		8177001801										
11 Green Leaf Nursery		8177001800										
1/1 IL TEEN LEAT NIITSETV	Eastin Casting	8177001805	10400 Washing (	Whitting	DO Dog 2215	Dias Dimen	CA	00000	CO	ТА	5 20	2 00
H Green Lear Mursery	Fermin Gutierrez	8177001804	10490 Washington Blvd	Whittier	PO Box 2215	Pico Rivera	CA	90660	GO	LA	5.20	3.00
356 Green Set, Inc.	Dan Needham	2320016903	11520 Vanowen St.	North Hollymood	1 11617 Dehougne St.	North Hollywood		91605	IP	LA	0.90	0.90

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	Α	CREAGE
#	<b>OWNER/ TENANT</b>	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
357	Green Set, Inc.	Dan Needham	2320017901	6732 Camellia Ave.	North Hollywood	11617 Dehougne St.	North Hollywood	CA	91605	IP	LA	2.00	2.00
557	Green Bet, me.		2320017901	0752 California Ave.	North Hony wood	11017 Denoughe St.	I tortin Honry wood		71005	11	LIT	2.00	2.00
358	Green Set, Inc.	Dan Needham	2320006907	11617 Dehougne St.	North Hollywood	11617 Dehougne St.	North Hollywood	CA	91605	IP	LA	2.00	2.00
			220700000	West of Laurel Canyon									
261	Cusan Smat Numary	Heater Harnon day	2307008900 2307007900	Blvd, between Saticoy and		PO Box 16926	North Hollywood	CA	91615	IP	ТА	4.13	4.13
361	Green Spot Nursery	Hector Hernandez	2012022012	Stagg St.	Los Angeles	PO B0X 10920	North Hollywood	CA	91015	IP	LA	4.15	4.15
			2012022015										
			2012022011										
			2012022010										
			2012022014	7659 Topanga Canyon									
	Green Thumb Nursery		2012022007	Blvd	Canoga Park	1 0 1	Canoga Park	CA		GO	LA	19	10.00
	Green Touch Nursery	<u> </u>	IP 4297029009	202 S. Mayo Ave.	Compton	202 S. Mayo Ave.	Compton	CA		GO	IP	5.00	3.00
250	Greene - Lania Vineyard	Jeff Greene	4387028008	9505 Lania Ln. East of the LA River,	Beverly Hills	95 N. County Rd.	Palm Beach	FL	33480	V	SM	5.00	3.00
	Growing Nursery / La			between Century Ave. and									
	Escondida Nursery	Antonio Avon	6236001270	the 105 Fwy	Paramount	7306 Walnut Ave.	Paramount	CA	90723	IP	LA	3.84	3.84
			7168033800										
			7168033801										
			7168033274										
			7168033289	6220 Lakewood		6220 Lakewood							
64	H & H Nursery	Robert Reyes	7168033285	Boulevard	Lakewood	Blvd.	Lakewood	CA	90712	М	SG	5.50	2.50
307	Hana Star Farms, Inc	Uidahika Kasahara	8174013800 8174004800	6509 Pioneer Blvd	Whittier	20646 Markham St.	Perris	CA	92570	D	IP	5.90	2.80
307	nalla Stal Fallis, liic	T CONTACT Dan Needham	4041013015		winttiel	20040 Markhalli St.	Ferris	CA	92370	K	IF	5.90	2.80
			4041013016										
			4041013017										
			4041013018										
			4041013019										
			4041013014										
			4041013013										
			4042031010										
			4042031009 4042031008										
			4042031008										
			4042031007										
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
	Hernandez Nursery		5047014902	5501 Rodeo Rd	Los Angeles	5501 Rodeo Rd	Los Angeles	CA		GO	SM	3.00	2.70
	Hevadu		4469021032	6415 Busch Drive	Malibu	6415 Busch Drive	Malibu	CA	90265	V	LA	8.00	2.75
			5266018801										
			5266017802										
			5266017800										
		D 114 "	5262028800	450 111			City of		01715	60		2.50	2.00
66	Hill Grove Nursery	Kaul Mejia	5263029800 7048012800	450 West Almora	Monterey Park	PO Box 92966	Industry	CA	91715	GO	IP	3.50	2.00
			7048012800										
284	House of Bonsai	Victoria Lee	7048012801	5214 Palo Verde Avenue	Lakewood	5214 Palo Verde Avenue	Lakewood	СА	90713	GO	IP	5.00	3.00
	Hoyt Family Vineyards	Carol & Steven Hoyt	4467018025	5929 Kanan Dume Rd	Malibu		Malibu	CA	90265	V	SM	1.50	0.80
	<u> </u>		6139004271	860 East Redondo Beach				-			1		
69	Humedo Nursery	Martin Torres	6139004273	Boulevard	Compton	P.O. Box 40299	Long Beach	CA	90804	GO	D	2.00	1.39

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	A	CREAGE
#	<b>OWNER/ TENANT</b>	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
								<u>.</u>					
70	Humedo Nursery	Martin Torres	6283024801	10040 Imperial Highway	Downey	P.O. Box 40299	Long Beach	CA	90804	GO	SG	3.00	2.20
186	I.T. Nursery Inc	Wayne Tagawa	6125014003	256 East Alondra	Gardena	256 E Alondra Blvd	Gardena	CA	90248	GO	D	2.76	1.75
363	International Palm Growers International Plant	Henry Cespedes Peter Landowski / Jeff	2642021900	9312 Canterbury Ave.	Arleta	PO Box 4218	Panorama City	CA	91331	IP	LA	3.40	3.40
73		Nakasone	7409020009	24500 Vermont Ave	Harbor City	24500 Vermont Avenue	Harbor City	CA	90710	C	П	6	5.00
	Isaac Ortega Nursery	Isaac Ortega	IP	11925 Bromont Ave.	Pacoima	12032 Wimberly Ave.	Sylmar	CA		IP	LA	2.2	2.20
501	ibuue onegu naisery	Isuue onegu		East of Alcoa Avenue,	Tuconnu	12002 (( initiality 11(c.	Symmet		<i>J</i> 1012		1	2.2	2.20
				between Slauson and									
365	Isaias Gonzalez Nursery	Isaias Gonzalez	6310027274	Randolph	Vernon	1810 Cogswell Rd.	South El Monte	CA	91733	IP	LA	1.87	1.87
			2320001902										
			2320008904										
			2320009902										
			2320006907 2320005904										
267	Jackson Shrub Supply, Inc.	Garry Jackson	2320005904	11505 Vanowen St	North Hollywood	11505 Vanowen St	North Hollywood	CA	91605	GO	LA	9.00	9.00
207	Jackson Shrub Suppry, me.	Gary Jackson	2320003903	East of Bonita Ave,	North Honywood		North Honywood	CA	91005	00	LA	9.00	9.00
				between Lincoln St and									
366	James T. Jung Nursery	James T. Jung	7404002278	Pacific St, Carson	Carson	6625 Montaire Pl.	La Palma	CA	90623	IP	D	0.83	0.83
	Jauregui Nursery, LLC	Filiberto Jauregui	7336009271	20300 Main	Carson	4185 Paseo de Oro	Cypress	CA	90630	GO	D	4.80	1.50
			6120025900										
			6120024900										
			6120026902				~			~~	-		
100	Jauregui Nursery, LLC	Filiberto Jauregui	6120027901 7048021271	551 West Alondra	Gardena	4185 Paseo de Oro	Cypress	CA	90630	GO	D	4.00	3.00
			7061008270										
			7061008275										
101	Jauregui Nursery, LLC	Filiberto Jauregui	7061008276	6741 Del Amo	Lakewood	4185 Paseo de Oro	Cypress	CA	90630	GO	SG	3.10	2.00
-			7339018902										
			7339018271										
367	Javier's Nursery	Javier Hernandez	7339018903	610 E. Carson Plaza Dr.	Carson	337 E. 237th St.	Carson	CA	90745	IP	D	5.76	5.76
			2415013901	East of Whitnall Hwy,									
2.00	Jesus & Juan Munoz		2415014900	between Oxnard St and					01004	J.D.	<b>T</b> 4		2.04
368	Nursery	Jesus Munoz	2415015901	Cahuenga Blvd West of Sutter Ave,	North Hollywood	206 W. Maple St. #E	Glendale	CA	91204	IP	LA	3.04	3.04
	Jesus Macias Gonzalez			between Wicks and San									
369	Nursery	Jesus Macias Gonzalez	2538008900	Fernando Rd.	Los Angeles	11064 Wicks St.	Sun Valley	СА	91352	IP	LA	1.60	1.60
507	ruisery		7318003809	i cinundo itu:	Los ringeres		Suir Vuirey		71002			1.00	1.00
			7318003808										
			7318003811										
74	Jorge's Nursery	Jorge Alcaraz	7318003807	100 E Greenleaf Blvd	Compton	4867 Daisy Ave	Long Beach	CA	90805	GO	LA	6.50	5.00
<b>a</b> c :	· · · ·		8115001907	Between the 60 and 605					0.0 40 4				1.00
384	Jose Munoz Nursery	Jose Munoz	8115001905	Fwy East of Chimineas Ave,	Whittier	12318 Kathleen St.	Whittier	CA	90601	IP	LA	4.00	4.00
				between Tribune St and									
370	Jose Vasquez Nursery	Jose Vasquez	2715012903	Chatsworth St.	Los Angeles	PO Box 17714	Encino	СА	91416	IP	LA	5.00	5.00
510	isse i usquez muisery	isse rusquez	2/15012/05	10718 S. Stanford Ave,	205 1 1150105				71710		1./ 1	5.00	2.00
371	Juan Aguilar Nursery	Juan Aguilar	6051002900	Los Angeles	Los Angeles	922 E. 42nd Pl.	Los Angeles	СА	90011	IP	LA	1.00	1.00

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	Α	CREAGE
#	OWNER/ TENANT	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
		<u>.</u>				<b>.</b>		_		1			
			6045019270		Ī				1	Ī	1		
			6045015271	North of 92nd St, between									
			6045015270	Fir Ave and Minder St. &									
	Juan Gregorio Aguirre		6045015272	North of 92nd St, between									
325	Nursery	Juan Gregorio Aguirre	6045015273	Miner St and Juniper St.	Los Angeles	9806 Anzac Ave.	Los Angeles	CA	90002	IP	LA	6.73	6.73
	Juan Otero/Junior's												
372	Nursery	Juan Otero/David Martinez	2118001901	18836 Saticoy	Reseda	6206 Burwood Ave.	Los Angeles	CA	90042	IP	LA	1.78	1.78
373	Juarez Nursery	Rolando E. Juarez	8664019270	6375 Wheeler Ave.	La Verne	8019 S. Hoover St.	Los Angeles	CA	90044	IP	SG	1.30	1.30
				East of Fairfax Ave,									
	Julio Deluis Espinoza			between Adams and Clyde			Los Angeles						
375	Nursery	Julio Deluis Espinoza	IP	Ave.	Los Angeles	1452 S. Ridgley Dr.	90016	CA	IP	IP	LA	1.88	1.88
				West of Yolanda Ave.									
	Junior's Nursery connected			between Hatteras and									
374	to Juan Otero's Nursery	David Martinez	2156021903	Miranda Ave.	Los Angeles	240 Robinson Rd.	Pasadena	CA	91104	IP	LA	1.08	1.08
268	K. Yuge Nursery	Steve Yuge	4066016054	2027 W 164th St	Torrance	2027 W 164th St	Torrance	CA	90504	GH	D	1.50	0.75
260		G. X	(120004024	336 W Redondo Beach	0 1	2027 W 1644 0	T.	C.	00504	CII	D	2.00	1.50
269	K. Yuge Nursery	Steve Yuge	6129004024	Blvd	Gardena	2027 W 164th St	Torrance	CA	90504	GH	D	2.00	1.50
295		Ctore Description	7490042020	1 El Rancho Escondido	A . 1	1925 D.11. 1 C D.1	G . 1	C A	02462	v	ID	4.00	4.00
285	Kangaru Enterprises, LLC	Steven Rusack	7480043020	Rd.	Avalon	1825 Ballard Canyon Rd.	Solvang	CA	93463	V	IP	4.90	4.90
	Katharina Hahn Vineyard												
	(Schetter Malibu)	Katharina Hahn/Jaime											
229	(Scheuer Mandu)	Page	4467003023	5825 Murphy Way	Malibu	5825 Murphy Way	Malibu	CA	90265	V	тл	0.80	0.50
	Kenyon Landscape	Kenny Unger	2615010901	14899 Chatsworth Dr.	North Hills	9816 Burnet Ave	Woodland Hills	CA CA		GO	LA LA	2.00	1.50
231	Kenyon Lanuscape	Kenny Onger	4096005800			9010 Duffiet Ave	woodiand mins	CA	71545	00	LA	2.00	1.50
			4096005801										
91	Kobata Growers, Inc.	Jack Mayesh	4096005802	17622 Van Ness Avenue	Torrance	17622 Van Ness	Torrance	CA	90504	GO	р	8.00	6.50
71	Robulu Orowers, me.	Suck Mayesh	4095001800		Torranee	17022 Vali 1000	Torranee	CH	20201	00	D	0.00	0.50
92	Kobata Growers, Inc.	Jack Mayesh	4095001802	17629 Van Ness Avenue	Torrance	17622 Van Ness	Torrance	CA	90504	С	D	6.50	6.50
-								-					
311	LA Sanchez Nursery	Eusebio Sanchez	8294030800	16525 Circle Hill Ln	Hacienda Heights	11159 1/2 Kauffman St.	El Monte	CA	91731	GO	SG	1.50	1.00
	, i i i i i i i i i i i i i i i i i i i												
376	La Cienega Nursery	Cirilo Gutierrez	IP	8511 Sherwood Dr.	West Hollywood	PO Box 950825	Mission Hills	CA	91395	IP	LA	3.70	3.70
228	La Vina Gomez de Malibu	Bob Tobias / David Gomez		32720 Mulholland Hwy	Malibu	P.O. Box 577	Agoura Hills	CA	91376	V	LA	5.00	0.90
			6268017270										
			6268017274										
212		Nhi Lam	6268017275	8600 Jefferson St.	Paramount	6319 California Ave	Long Beach	CA	90805	R	LA	3.00	1.00
	Landscape Warehouse												
253	Nursery & Supply	Jose Robles/Edaena Pano	8610001800	2800 Royal Oaks Dr	Duarte	1673 E. Walnut St.	Pasadena	CA	91106	GO	SG	2.00	1.25
• • •	LB Palm Growers/Moon				D 110				0.000			4.50	
286	Valley	Cipriano Martinez	7107004800	17020 Downey Rd.	Bellflower	19820 N. 7th St., Suite 260	) Phoenix	AZ	85024	GO	LA	4.50	4.00
105		To an Trata 1	2763001904	19900 Pl C	NT	2251 L . C'	T. A T		00015	CII		2.66	1.00
105	Live Art Plantscapes, Inc.	Larry Tabeling	2763030900 6115013007	18809 Plummer St	Northridge	3351 La Cienega Place	Los Angeles	CA	90016	GH	LA	3.66	1.80
			6115013007										
			6115013008										
	Lloyd's Nursery /		6115013010										
121	Nakayama Nursery Inc.	Lloyd Nakayama	6115013010	1341 W. 141st Street	Gardena	1341 W 141st Street	Gardena	CA	90247	GO	П	0.75	0.75
121	Lomita Plant Growers	Mercedes Sanabria	7404030900	835 E Lomita Blvd	Wilmington	835 East Lomita Blvd.	Wilmington	CA CA	90247 90744	GO	D	0.75 3.02	2.50
106 377	Lopez Nursery	Francisco Lopez	2631011900	11763 Rialto St.	Sun Valley	855 East Lomita Bivd. 8513 Tilden Ave.	Panorama City	CA		IP	LA	5.02 1.51	1.51
511	Lopez mulsery	r rancisco Lopez	2031011700	11/05 Mailo St.	Sun vancy	10313 Thuến Ave.	anoralita City	СЛ	21402	111	LA	11	1.71

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	s A	CREAGE
#	<b>OWNER/ TENANT</b>	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
									1				
331	Lorenzo Sanchez Nursery	Lorenzo Sanchez	2642001900	14001 Garber St.	Arleta	14001 Garber St.	Arleta	СА	91331	IP	LA	0.81	0.81
378	Los Pinos Nursery	Rodolfo Reynoso	2308024900	7860 Whisett Ave	North Hollywood	7860 Whisett Ave.	North Hollywood	СА	91605	IP	LA	3.15	3.15
				West of Bonita St. Between Sepulveda and									
270	Lucky Plants	Javier Lopez	7404001278	Lincoln	Carson	902 Sepulveda Blvd	Carson	СА	90745	GO	D	1.00	0.82
37	Lucky Plants Nursery	Steven Chu	4085026800	17715 Amie Ave.	Torrance	1062 Aviation Blvd.	Hermosa Beach	СА	90254	IP	D	3.75	2.50
				14515 S. Raymond Ave.			Hermosa						
321	Lucky Plants Nursery	Steven Chu	IP	Gardena, CA 90247	Gardena	1062 Aviation Blvd.	Beach	CA	90254	IP	D	3.00	2.50
379	Lynne Vinkovic Nursery	Lynne Vinkovic	IP	1217 Oak Grove Dr.	Los Angeles	1217 Oak Grove Dr.	Los Angeles	CA	90041	IP	LA	0.28	0.28
380	Macias Nursery	Ignacio Macias	2604041903	15594 Bledsoe St.	Sylmar	14506 Bledsoe St.	Sylmar Sonto	CA	91342	IP	LA	2.24	2.24
287	Maggie's Farm	Nate Pietso / Casey Kramer	2055001032	6500 Chesboro Rd	Agoura Hillas	918 11th St #9	Santa Monica	СА	90403	R	IP	4.00	4.00
			5751022801 5860013800										
113	Magic Growers, Inc.	Bob & Leilani Underwood	5857035901	2795 Eaton Canyon Drive	Pasadena	2795 Eaton Canyon Drive	Pasadena	CA	91107	GO	LA	8.00	8.00
288	Malibu Organic Lemon	Mike Zacha	4472010023	1872 Encinal Canyon	Malibu	1700 Decker Canyon Rd	Malibu	CA	90265	0	LA	220.00	15.00
	Malibu Rocky Oaks					3200 Airport Ave. Suite							
235	Vineyard	Howard Leight	2058017025	340 Kanan Road	Malibu	16	Santa Monica	СА	90405	v	LA	35.00	7.00
				North East corner of 166th									
254	Manassero Farms	Dan Manassero	7016007906	& Studebaker Rd.	Cerritos	9925 Via La Granja	Yorba Linda	CA	92886	R	SG	4.00	3.00
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
114	Mariposa Garden	Ron Hill	7049014904	6664 South Street	Lakewood	6664 South Street	Lakewood	CA		GO	SG	4.00	3.68
312	Martinez Nursery	Angel Martinez	7165019803	5761 Ashworth St	Lakewood	PO Box 1665	Bellflower	CA	90707	GO	SG	2.00	1.50
289	MB Landscaping and Nursery	Maria Martinez	7336004010	20300 S. Figueroa St	Carson	20300 S. Figueroa St.	Carson	СА	90745	GO	D	2.50	1.50
209	MB Landscaping and		7550004010	20500 S. Figueroa St	Carson	20300 S. Figueroa St.	Carson	CA	907 <del>4</del> 3	00	D	2.30	1.50
290	Nursery	Maria Martinez	6126009802	201 E Walnut Street	Carson	20300 S. Figueroa St.	Carson	СА	90745	GO	D	6.20	5.00
	MB Landscaping and		6134008270 6134001271										
292		Maria Martinez	6134001270	700 135th St.	Los Angeles	20300 S. Figueroa St.	Carson	CA	90745	GO	D	6.20	4.00
271	Melhill Vineyard	Tish Lehew / Jeff Lotman	4432011045	1805 Melhill Way	Los Angeles	1805 Melhill Way	Los Angeles	СА	90049	V	SM	0.30	0.30
	*	Sergio Vargas	7116001800	6901 Orange Ave	Long Beach	7016 Sherman Way	Bell	CA		GO	LA	2.00	2.00
112	Wezedia Wursery	Sergio Vargas	7344007038	0701 Ofalige Ave	Long Deach	7010 Sherman way	ben	CA	70201	00		2.00	2.00
40	Mikamo Nursery	Edith Mikamo	7344007039	1029 W. 223 Street	Torrance	1029 W. 223 Rd St.	Torrance	СА	90502	F	D	1.00	0.75
10			6351035804	1027 11 225 54000		1019 W. 220 Ka St.			70502	-	2	1.00	0.170
306	Mimosa Nursery LA	Colette Guyenne	6351035803 6351035807	6270 Allston Street	Los Angeles	6270 Allston Street	Los Angeles	СА	90022	GO	LA	3.30	2.20
	Miyako Bonsai Nursery	Kenichiro Kawaguchi	6132006900	552 W. 140th St.	Gardena	552 W. 140th St.	Gardena	CA		IP	D	2.18	2.18
202	Miyako Bolisal Nursery	Kemenno Kawaguem	6115019043	552 w. 140th St.	Gardena	552 w. 140th St.	Gardena	CA	90248	IP	D	2.18	2.18
			6115019045										
			6115019045	13633 South Vermont									
55	Moneta Nursery, Inc.	Gary Ishii	6115019042		Gardena	13633 S. Vermont Avenue	Gardana	CA	90247	М	D	4.75	3.00
55	woncia wursery, Ilic.		4368005025	Avenue	Jaiuella	15055 S. Vermont Avenue	Jaiuella	CA	70247	141		4.73	3.00
			4368006007										
			4368024020										
100	Moraga Vineyards	Soott Dich		1070 Morace Dr	Los Angeles	650 N. Samuluada Divid	Los Ancelas	CA	00040	V	ТА	00	7.00
199	moraga vineyards	Scott Rich	4368024025	1070 Moraga Dr.	Los Angeles	650 N. Sepulveda Blvd	Los Angeles	CA	90049	v	LA	8.00	7.00

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	A	CREAGE
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			· · · ·										
			7165012282										
61	My Hoa Farm	Han Luong	7165013274	5760 Allington Street	Lakewood	5726 Candor St.	Lakewood	CA	90713	R	SG	5.25	2.50
	N.K. Nursery	Kaz Kitajima	8242016810	780 S. Stimson Ave	City of Industry	780 S. Stimson Ave	City of Industry	CA		GO	IP	2.00	1.00
			2763002900										
	New View Landscape,		2763030901										
385	Inc./Green View Nursery	Michael Stell	2763001905	18590 Lassen St.	Northridge	24860 Calabasas Rd.	Calabasas	CA	91302	IP	LA	9.31	9.31
	-		2521012001	West of Lindley between				<b>a</b> .		<b>ID</b>	<b>.</b> .		
386	View Landscape, Inc.	Michael Stell	2731012901	San Jose and Devonshire	Northridge	17566 Chase St.	Northridge	CA	91325	IP	LA	5.10	5.10
52	Now West Crowses Inc	Grace Hernandez	7210004002	1601 S. Santa Fe	Commton	1412 Konnoth Dd #227	Clandala	CA	01201	CO	та	2 50	1 70
		Grace Hernandez	7318004803	Ave 110 West Greenleaf	Compton	1413 Kenneth Rd. #227 1413 Kenneth Rd. #227	Glendale Glendale	CA CA		GO GO	LA LA	3.50 3.00	1.70 1.00
54	new west Glowers, Inc.		na 2310006900	110 west Greenlear	Compton	1415 Kellileul Ku. #227	Gielidale	CA	91201	00	LA	5.00	1.00
117	Nick's Nurserv	Nicolas Alvarado	2310007900	11800 Roscoe Blvd.	Sun Valley	11800 Roscoe Blvd	Sun Valley	СА	91352	GO	LA	3.25	2.25
117	r (lon b r (diber y	i (icolus i li vuluuo	2510007700	West of Yoland Ave.	Sun vanoy	11000 Rosece Bird	Buil Vulley	0.11	<i>J1002</i>		271	3.20	2.20
				between Linnet St. and									
397	Nick Williams Nursery	Nick Williams	2161004907	Wells Dr.	Los Angeles	1061 Meadows End Dr.	Calabasas	CA	91302	IP	LA	0.69	0.69
	~		5387037800										
			5388036800										
			5388036801										
			5388038802										
			5388038803										
			5388038800										
125	Norman's Nursery, Inc.	Nancy Norman	5388038801	1150 E Broadway	San Gabriel	8665 E. Duarte Rd.	San Gabriel	CA	91775	GO	LA	10.40	7.00
	N.K. Nursery       K         New View Landscape,       M         Inc./Green View Nursery       M         Green View Nursery/New       M         Jew Uset Growers, Inc.       M         New West Growers, Inc.       G         New West Growers, Inc.       G         New West Growers, Inc.       G         Nick 's Nursery       N         Nick Williams Nursery       N         Norman's Nursery, Inc.       N		5376008800										
100	K. Nursery       K         w View Landscape,       M         c./Green View Nursery       M         reen View Nursery/New       M         reen View Nursery/New       M         reew Uandscape, Inc.       M         ew West Growers, Inc.       G         ew West Growers, Inc.       G         ick 's Nursery       N         ick Williams Nursery       N         orman's Nursery, Inc.       N		5376008801					<b>C</b> 1	01775	<b>G</b> 0	<b>T</b> .	12.40	0.70
129	Norman's Nursery, Inc.	Nancy Norman	5376008802 5282031901	8633 Duarte Rd North	San Gabriel	8665 E. Duarte Rd.	San Gabriel	CA	91775	GO	LA	12.49	9.73
			5282031900										
			5282028904										
			5282028904										
131	Norman's Nursery Inc	Nancy Norman	5282028903	1601 Loma Ave	El Monte	8665 E. Duarte Rd.	San Gabriel	СА	91775	GO	SG	9.13	7.30
101	1 (01111011 5 1 (01501 5), 11101		5381009815			oood 2. 2 amile Ital	Sun Ouener	0.11	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		~~	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			5381009814										
			5381009816										
			5381009817										
132	Norman's Nursery, Inc.	Nancy Norman	5381015805	8624 Duarte Rd South	San Gabriel	8665 E. Duarte Rd.	San Gabriel	CA	91775	GO	LA	8.63	6.50
233	Nuccio's Nursery, Inc.	Julius, Tom & Jim Nuccio		3555 Chaney Trail	Altadena	3555 Chaney Trail	Altadena	CA	91001	GO	LA	80.00	5.00
			7167034270										
			7167034801										
125			7167034800		T .1 . 1	10715 0 337	C 1		00240	<u>co</u>	50	0.00	C 00
135	Okada Nursery, Inc.	Herb Okada	7167033270	6239 Bellflower Blvd	Lakewood	18715 S Western Ave	Gardena	CA	90248	GO	SG	8.00	6.00
				East of Eastbrook Ave.									
				between Ashworth St. and									
362	Oscar Hernandez Nursery	Oscar Hernandez	7165020270	Allington St. Lakewood	Lakewood	10639 Lakefront Dr.	Norwalk	CA	90650	IP	SG	1.84	1.84
502	oscar fromandoz tvarsory		4467021002						70050	11	50	1.07	1.07
313	Pacific View Nursery	Erik Munoz	4467021002	29081 Pacific Coast Hwy	Malibu	29081 Pacific Coast Hwy	Malibu	СА	90265	GO	SM	4.76	4.00
010		Cecilio Cabral / Magaly	2531016801		Lake View				20200				
	Paramount Landscape	Cabral	2530006800	11944 Terra Bella St	Terrace	9848 Ramona Ave	North Hills	CA	91343	GO	LA	7.00	5.00

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	s A	CREAGE
#	<b>OWNER/ TENANT</b>	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
		00111101		112211200	0111		0111				1		
				West of Stanford Ave,							1		
				between Alondra and									
387	Pascual Aguilar Nursery	Pascual Aguilar	IP	Flower Ave.	Los Angeles	149 E. 78th St.	Los Angeles	CA	90003	IP	LA	1.18	1.18
207			4151012800	2501 Manhattan Beach	Los ringeles	6001 E Los Angeles	Los i ingeles		20005		2.1		1.10
141	Performance Nursery, Inc.	Tom Lucas	4151013800	Boulevard	Redondo Beach	Avenue	Somis	CA	93066	GO	D	4.78	3.00
			7502006802										
			7502006803										
			7502004806										
			7502004807										
			7502001803										
		Peter Serrato / Teresa	7502001804										
136	Peter's Garden Center, Inc.	Serrato	7502001802	814 N. Pacific Coast Hwy	Redondo Beach	814 N. Pacific Coast Hwy.	Redondo Beach	CA	90277	М	SM	2.50	1.00
	Pierce College	Paul Nieman	2149007902	6201 Winnetka Ave	Woodland Hills	6201 Winnetka Ave		CA		M	LA	430.00	200.00
			7107002900										
			7107002272										
			7107002271	West of Lakewood Blvd.,									
			7107001271	between Alondra and									
388	Plantasia, Inc.	Alex Colovic	7107001270	Flower Ave.	IP	2550 Via Tejon Suite 3F	Palos Verdes	CA	90274	IP	IP	5.57	5.57
	, , , , , , , , , , , , , , , , , , ,		8551011270			5							
			8551011271										
314	Plascencia Nursery	Maria Silva	8556099272	12920 Ramona Blvd	Baldwin Park	PO Box 1952	Temple City	CA	91760	GO	SG	5.00	4.00
	Premium Trees, LLC /		5268005801				1 2						
294	Moon Valley	Cipriano Martinez	5268005802	2600 W Lincoln Ave	Montebello	19820 N. 7th St., Suite 260	) Phoenix	AZ	85024	GO	SG	16.50	7.00
		•	6230023801										
256	Pro Growers, Inc.	Sal Mora/Juan Perez	6230023800	8303 S. Scout Ave	Bell Gardens	8303 S. Scout Ave	Bell Gardens	CA	90201	GO	LA	13.00	8.00
				West of San Fernando Rd.									
	RJ's Demolition and			between Telfair and									
391	Disposal	IP	2604002903	Roxford St.	Los Angeles	1213 S. Fir Ave.	Inglewood	CA	90301	IP	LA	5.24	5.24
151	Rainforest Flora Inc.	Jerry Robinson	7522006800	19121 Hawthorne Blvd	Torrance	19121 Hawthorne Blvd.	Torrance	CA	90503	GH	D	5.00	1.00
389	Ramirez Nursery	Guillermo Ramirez	6132005900	570 W. 135th St.	Gardena	570 W. 135th St.	Gardena	CA	90248	IP	D	2.96	2.96
	Ramirez Strawberry		7317015805										
302	Ranch	Rigoberto Ramirez	7317015806	3511 Santa Fe Ave.	Long Beach	2710 Delta Ave	Long Beach	CA	90810	R	IP	2.50	2.00
	Rancho Escondido		4464027018			Raleigh Enterprises, 100	Santa						
152	Vineyard	George Rosenthal	4464027013	Newton Cyn & Kanan Rd	Malibu	Wilshire Blvd., 8th Floor	Monica	CA	90401	V	SM	25.00	25.00
							Santa						
230	Rancho Mar LLC	Bob Tobias	4457004048	2800 Malibu Canyon Road	l Malibu	1250 4th Street	Monica	CA	90401	М	LA	40.00	5.00
381	Raul Martinez Nursery	Raul Martinez	7339008913	565 189 St.	Gardena	565 189 St.	Gardena	CA	90248	IP	D	1.00	1.00
322	Reyes Winery	Robert Reyes	3213016029	10262 Sierra Hwy	Santa Clarita	1227 Buena Vista #C	Duarte	CA	91010	V	SC	16.00	14.00
			7116016802										
56	Ricardo's Nursery	Ricardo Arrivillaga	7116016801	6850 Atlantic Ave	Long Beach	6850 Atlantic Ave	Long Beach	CA	90805	GO	LA	9.00	7.00
		Antonio Garcia/Fidel	6241001270										
390	Rio Verde Nursery	Reyes	6241001271	14809 Downey Ave.	Paramount	14809 Downey Ave.	Paramount	CA	90723	IP	LA	3.70	3.70
		Esteban Villafana / Koji											
154	Rolling Hills Nursery	Shimohara	7116001800	6944 Orange Ave	Long Beach	PO Box 789	Paramount	CA	90723	GO	LA	8.00	6.00
			2305003900										
			2305002018	12741 Cantara St. North		12741 Cantara St. North							
392	Roscoe Nursery	Gustavo Ramirez	2305001900	Hollywood, CA 91605	North Hollywood	Hollywood, CA 91605	North Hollywood	CA	91605	IP	LA	1.86	1.86

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	Α	CREAGE
#	OWNER/ TENANT	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
			7304024802										
			7304024801										
			7304024800										
			7304012803										
			7304012804										
			7304012805										
			7304012806										
			7304012807										
			7304012808										
0.6	D ' M	I D'	7304012809		I D I		I D I		00005	<b>GO</b>	<b>T</b> 4	1.1.6	2 00
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
168	S Y Nursery, Inc.	Patty Yasutake	7055008800	19900 S Pioneer Blvd	Cerritos	19900 S. Pioneer Blvd.	Cerritos	CA	90703	GO	SG	6.00	4.75
	Saddlerock Ranch / The		2058016008										
237	Semler Companies Malibu	Ronald H. Semler	2058016022	31727 Mulholland Hwy	Malibu	32111 Mulholland Hwy	Malibu	CA	90265	М	LA	90.00	38.00
			5381015802										
			5381015806										
			5381015807										
150	0.1.1.1.N.		5381015808	9529 9601 Land 1. A			D 1		01770	<u>co</u>	T A	7.00	C 90
158	Sakaida Nursery, Inc.	Mike Gutierrez	5381015809 5389005800	8538-8601 Longden Ave	San Gabriel	8626 E. Grand Ave.	Rosemead	CA	91770	GO	LA	7.00	6.89
150	Sakaida Nursery, Inc.	Mike Gutierrez	5389005803	8626 E Grand Ave	Rosemead	8626 E. Grand Ave.	Rosemead	CA	91770	GO	LA	4.50	4.00
	Sakaida Nursery, Inc.	Mike Gutierrez	5381011011	6544 N. Vista Street	San Gabriel	8626 E. Grand Ave.	Rosemead			GO		4.00	3.00
100	Sakaida Nuisery, me.		/165001270		San Gabrier	0020 E. Ofalid Ave.	Roseniead	CA	71770	00		4.00	5.00
			7165001011										
			7165001271										
			7165001275										
			7165001272										
			7165019270										
			7165001801										
			7165001800										
			7165019800										
			7165019801										
			7165019805										
161	Salco Growers	Frank Spina	7165019804	6236 Bellflower Rd	Lakewood	6236 Bellflower Blvd	Lakewood	CA	90713	С	SG	4.00	2.00
						Breslauer, Rutman and							
	SAM Trust- Amalfi	Andrea Sama	4425005022	1515 Am 16 D	Desifie Deliver	Anderson, 11400 Olympic		CA	00064	V	SN/	1.00	1.00
214	Vineyard	Andrea Spencer	4425005032 2538002900	1515 Amalfi Dr	Pacific Palisades	Blvd, Ste 550	Los Angeles	CA	90064	V	SM	1.00	1.00
			2538002900										
			2538003900										
			2538022901										
	San Antonio Nursery Corp	DefeatMartin	2538022901	11753 Wicks St.	Sun Valley	11753 Wicks St.	Sun Valley	CA	91352	CO	IP	16.10	14.00

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	Α	CREAGE
#	OWNER/ TENANT	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
	orist Sv aticoy Nursery A aticoy Nursery A carborough Farms A empervirens Botanical ompany Jo hima Nursery Tr hima Nursery Tr								•				
			5373028025										
			5373028025										
			5373028020										
			5373028027										
			5373028028										
			5373028036										
			5373028009										
			5373028010										
			5373028011										
			5373028012										
			5373028013										
			5373028014										
			5373028015										
			5373028016										
			5373028017										
			5373028018										
			5373028019										
	•	Fred Yoshimura / Mary	5373028020	632 S San Gabriel		632 South San Gabriel			01776		<b>T</b> 4	<b>7</b> 00	1.00
164	Florist	Swanton	5373028021	Blvd	San Gabriel	Blvd.	San Gabriel	CA	91776	М	LA	5.00	4.00
316	Saticov Nurserv	Armando Orozco Torres	IP	IP	North Hollywood	11321 Runnymede St.	Sun Valley	CA	91352	GO	LA	5.00	4.00
				West of Laurel Canyon			~						
			2307015900	Blvd. between Lull Ave.									
399	Saticoy Nursery	Armando Orozco Torres	2307015903	and Saticoy St.	Los Angeles	11321 Runnymede St.	Sun Valley	CA	91352	IP	LA	1.20	1.20
					Woodland					_			
		Ann Stein	2068001003	23302 Mulholand Dr	Hills	PO Box 1267	Oxnard	CA	93032	R	LA	7.00	6.00
		John Low	4096001054	18715 S Western Ave	Gardena	18715 S Western Ave	Gardena	СА	90248	C	D	2.00	0.50
154	*	Frank Tsushima / Roger	4090001034	10/15 5 Western Ave	Galdella	18/15 5 Western Ave	Galuella	CA	90248	C	D	2.00	0.50
45	Shima Nursery	Tsushima	5389006807	8625 Grand Ave	Rosemead	8625 E. Grand Ave	Rosemead	СА	91770	GO	LA	2.90	1.30
			5372020804										
258	Shima Nursery	Tsushima	5372020801	8521 Valley Blvd.	Rosemead	8625 E. Grand Ave	Rosemead	CA	91770	GO	LA	7.80	5.00
		Frank Tsushima / Roger											
259	Shima Nursery	Tsushima	5371010802	8524 E. Marshall	Rosemead	8625 E. Grand Ave	Rosemead	CA	91770	GO	LA	8.60	6.50
				South of Big Tujunga		2115 E. d. 11 D1 1 0 10							
202	Sianna Arbaraana Ca	ID	IP	Canyon Rd. and North of Mt. Gleason Ave.	Los Angeles	3115 Foothill Blvd. Suite M140	La Crescenta	CA	91214	ID	LA	3.93	3.93
393	Stenina Arborscape Co.	Ir	6120023910	Mit. Gleason Ave.	Los Aligeles	W1140	La Crescenta	CA	91214	Ir	LA	3.93	5.95
394	Soto Nursery	IP	6120023908	600 W. Alondra Blvd.	Gardena 90248	1058 W. 204th St.	Torrance	CA	90502	IP	D	2.02	2.02
			6385005800										
			6385005801										
			6385016800										
57	Specialized Growers	Reuben Valdez	6385016801	8406 Pico Vista Dr.	Pico Rivera	8406 Pico Vista Dr.	Pico Rivera	CA	90660	GO	SG	2.70	1.50
			8558023800										
217	Starling Numary Company	David Maiia	8558023801 8558023802	1233 Vineland Ave	La Puente	PO Box 1000	La Puente	CA	91747	GO	SG	4.00	3.50
517	Starmie Nursery Company		0550025002	1255 vinetallu Ave	Hacienda	T O DUX 1000		CA	71/4/		30	4.00	5.50
318	Starline Nursery Company	David Meiia	IP	16505 Colima Rd	Heights	PO Box 1000	La Puente	CA	91747	GO	SG	2.50	2.00
	in the second company		4096005007										
142	Sunflower Farms	Ron Akiyama	4096005800	17609 S. Western Ave.	Gardena	17609 S Western Avenue	Gardena	CA	90247	F	D	4.00	3.50

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	A	CREAGE
#	OWNER/ TENANT	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
			5288003801										
			5288003802										
319	Sunshine Food & Nursery	Kevin Wong	5288003800	8500 Dorothy St.	Rosemead	8500 Dorothy St.	Rosemead	CA		GO	SG	6.50	5.00
395	Tops Landscape Co.	Yun Kong	IP	18809 Calvert St.	Reseda	18809 Calvert St.	Reseda	CA	91335	IP	LA	5.64	5.64
	Torrance Wholesale												
295	Nursery	Margaret Edelman	4089016802	18901 Ermanita Ave	Torrance	18901 Ermanita Ave.	Torrance	CA	90504	GO	D	2.00	1.87
<b>a</b> 60									01001		<b>G 1 (</b>	10.00	1.07
260	Triunfo Canyon Vineyards	Laura Gilbard	2063002092	3030 Triunfo Canyon Rd	Agoura	3030 Triunfo Canyon Rd	Agoura	CA	91301	V	SM	10.00	1.25
			7521012800 7521001802										
171		TT X7 (1	7522006800	Between Firmona Ave. /	Ŧ	5001 4 1 04 4	T		00502	<u></u>	C) (	21.25	12.50
1/1	T-Y Nursery, Inc.	Terry Yasutake	7520009801 7502012800	N. Beryl St.	Torrance	5221 Arvada Street	Torrance	CA	90503	GO	SM	21.25	13.50
			7502008804										
			7502008802										
			7502008802										
			7502008800	Between Flagler Ln. / N.									
176	T-Y Nursery, Inc.	Terry Yasutake	7502013800	Paulina Ave.	Redondo Beach	5221 Arvada Street	Tomonoo	CA	90503	GO	SM	12.00	7.50
170	1-1 Nursery, Inc.	Terry Fasulake	2525001802	Paulina Ave.	Redolido Beach	5221 Arvada Street	Torrance	CA	90303	60	SIM	12.00	7.50
			2525001802										
178	Ultra Greens Nursery	Michael Lentz	2525001801	13102 Maclay Street	Sylmar	P O Box 922259	Sylmar	CA	91392	GO	LA	10.00	8.50
179	Ultra Greens Nursery	Michael Lentz	2504009800	14025 Polk Street	Sylmar	P O Box 922259	Sylmar	CA	91392	GO	LA	1.50	1.23
177		Alberto Gomez / Ariana	7339009901		Symu	1 O DOX 722237	Syman	CIT	71372	00	LIT	1.50	1.25
297	UVA Nursery	Gutierrez	7339009272	19033 Anelo Ave	Gardena	17516 Scudder Ct.	Carson	CA	90746	GO	D	2.00	1.50
_> .			2126014900				Curbon		20110	00	2	2100	1.00
299	V & N Nursery	Jose Uribe	2126015902	18841 Hart St	Reseda	3948 Sepulveda Blvd.	Culver City	СА	90230	GO	LA	3.00	1.50
	Valley Crest Tree							-					
320	Company	Robert Crudup	2548001011	9500 Foothill Blvd	Sunland	3200 West Telegraph Rd.	Fillmore	CA	93015	GO	LA	1.00	0.50
		<u>^</u>	2689002910										
184	Valley Sod Farm, Inc.	Dan Gibson	2689002909	16405 Chase Street	North Hills	16405 Chase Street	North Hills	CA	91343	S	LA	36.00	36.00
		Oscar Vargas/ Reuben											
149	Vargas Nursery	Vargas	7162001274	17020 Passage Ave	Bellflower	3925 E. Elizabeth St	Compton	CA	90221	GO	SG	1.75	1.75
382	Victor Martinez Nursery	Victor Martinez	6242033006	13933 Paramount Blvd.	Paramount	13933 Paramount Blvd.	Paramount	CA	90723	IP	LA	1.88	1.88
		Fidel Montenegro/ Gaby	2414003902				North						
298	Vineland Growers Nursery	Ruiz	2414003901	6200 Vineland Ave	North Hollywood	6200 Vineland Ave	Hollywood	CA	91606	GO	IP	5.00	2.00
				West of Laurel Canyon									
				Blvd. between Saticoy and									
396	Wendy's Nursery	Juan Ramirez	IP	Cohasset	Los Angeles	PO Box 4916	Panorama City	CA	91412	IP	LA	1.70	1.70
		Dave Zylstra / Mark											
	West Covina Wholesale	Barrios / Olegario	8666021902									1	
187	Nursery	Gonzalez	8666021904	2820 Amherst Ave	La Verne	P. O. Box 8046	La Verne	CA	91750	GO	SG	5.00	4.50
												1	
				West end of Puddingstone								1	
		Dave Zylstra / Mark		West off of Fairplex at									
100	West Covina Wholesale	Barrios / Olegario	0070000010	Bracket Field / 1420	<b>x x y</b>				01770				15.05
188	Nursery	Gonzalez	8378022910	Puddingstone Dr.	La Verne	P. O. Box 8046	La Verne	CA	91750	GO	SG	20.00	15.25

NGA		<b>OPERATOR</b> /		PARCEL			MAILING				Waters	Α	CREAGE
#	OWNER/ TENANT	CONTACT	APN	ADDRESS	CITY	ADDRESS	CITY	STATE	ZIP	CROP TYPE	hed	TOTAL	IRRIGATED
							-					-	
	West Covina Wholesale Nursery	Dave Zylstra / Mark Barrios / Olegario Gonzalez	5386015800 5386015801 5386015802 5386015803 5387004801 5387004800 5387004802 5387004803	5820 Burton Ave.	San Gabriel	P. O. Box 8046	La Verne	CA	91750	GO	LA	15.00	15.00
-, •		Rodrigo Ramirez (New											
95	Wilmington Nursery	Owner)	7404034900	898 Deloras Drive	Wilmington	898 E Deloras Drive	Carson	CA	90745	GO	D	3.50	2.50
	Wish Vineyard LLC	Susan Hayes	2049006031	25045 Jim Bridger Rd	Hidden Hills	25045 Jim Bridger Rd	Hidden Hills	CA	93102	V	LA	0.66	0.66
204	Worldwide Exotics Inc.	Shelly Jennings	2528025800	11157 Orcas Avenue	Lake View bTerrace	10260 Arnwood Rd.	Lake View Terrace	СА	91342	GO	LA	6.00	2.00
238	Zuma Canyon Orchids	George Vasquez	4467024003	5949 Bonsall Drive	Malibu	5949 Bonsall Dr.	Malibu	CA	90265	GH	LA	3.89	0.20

TOTALS

# 271

# IP In Progress - still gathering information

atershe	eds:	# Operations	Irrigated Acres	Crop Type:		# Operations	Irrig
D	Dominguez Channel LA/Long Beach Harbors WMA	57	171.85	F	Cutflower	3	5.95
LA	Los Angeles River Watershed	129	761.62	GO	Ornamental	130	545.3
SC	Santa Clara River Watershed	6	284	С	Color Plants	12	71.6
SG	San Gabriel River Watershed	43	502.67	V	Vineyard	20	142.5
SM	Santa Monica WMA	16	65.97	GH	Greenhouse	5	5.25
SA	Santa Anna River Watershed (Located in the Santa Ana Region)	1	3	0	Orchard	2	18
IP	In Progress	19	63.63	S	Sod	1	36
				М	Multiple	11	794
				R	Row Crop	8	22.3
				IP	In Progress	79	211.7
			271 1852.74				
						271	

4443.66

1852.74

# rigated Acres

.95 45.34 1.6 42.56 .25 8

94 2.3

11.74

1852.74

# **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

	<b>[</b>	1		1															IKKIGATED																	
							nun el				CWIL Order	# R4-2005-0	- 10	YEAR 3		VEAD 4			v	77 A D 1		1		# R4-2010-0186	v	EAD 2			VEAD 4		_		TION, CWIL		# R4-2016-0143	
	OWNER/TENANT	NGA #	PROPERTY ADDRESS	ACREAGE	Dry S		EAR 1 ¹	et Season	D	y Season	YEAR 2 ²	et Season	Dry Seas		on Dry Sea	YEAR 4 Ison Wet S		Interim Sampling Event ³	Y Dry Season	EAR 1	t Season	YEAR 2 Dry Season	Wet Seaso	-6 D-	y Season	EAR 3	Season	Dry Se	YEAR 4	et Season		Season	Wet Season	Dry Season	erim Locations Wet Seaso	
				(Irrigated)	Event	Even		1		-		-		n wet Seas	-			March	Event Event							Event	1	Event			Event	Event	Event Event	-	-	on Event
					#1	#2	#1	#2	#1	#2	#1	#2	#1	#1	#1	. 2.,		2011	#1 #2	#1	#2	#1 #2 #	#1	Event Event #2 #1	#2	#1	#2	#1	Event Even #2 #1	#2	#1	#2	#1 #2	#1 #2	#1	#2
	Boething Treeland Farms, Inc.	19	23475 Long Valley Road, Woodland Hills	14.68	8/13/07	9/25/0	7 12/18/0	1/5/08	8/12/08	9/23/0	08 11/26/0	8 12/15/	08 10/12/0	ns*	8/19/	10 ns	*	3/23/11	10/11/11					nv		2/28/14			10/7/14		9/30/15			9/2/16	IP	IP
TADO	Norman's Nsy-Broadway	124/125	8550 E Broadway, San Gabriel	7.00	8/13/07	9/24/0	7 12/7/0	7 1/5/08	8/12/08	9/24/0	08 11/26/0	8 12/15/	08 10/12/0	ns*	8/18/	10 ns	*	3/21/11	10/11/11					nv		2/28/14			10/7/14		9/30/15			9/20/16	IP	IP
GRC	Ultra Greens	178	13102 Maclay Street, Sylmar	8.50		Si	e not included	l as a samplin	g location.		11/26/0	8 12/15/	08 10/12/0	ns*	8/17/	10 ns	*		10/11/11					nv		2/28/14			10/7/14		9/30/15			9/20/16	IP	IP
	Valley Sod Farms, Inc.	184	16405 Chase Street, North Hills	36.00		Si	e not included	l as a samplin	g location.		11/26/0	8 12/15/	08 10/12/0	ns*	8/17/	10 ns	*		10/11/11					nv		2/28/14			10/7/14		9/30/15			9/20/16	IP	IP
	Acosta Growers Inc.	11	669 S. Azusa Ave., Azusa	7.50							Site not in	cluded as a	ampling location.						Rot	tating Site		8/28/12					nv		12/2/1	4		10/2/15			IP	IP
0.P 2	M Downard-Rainbow Garden Nursery	110	1132 S Grand Avenue, Glendora	3.75	8/8/07	9/25/0	7 1/4/08	ns ⁴	8/12/08	9/23/0	08 11/26/0	8 12/15/	08 10/11/0	ns*	8/18/	10 ns	*		10/12/11	1		8/28/12					nv		12/2/1	4		10/2/15			IP	IP
GRC	R Wilson-Colorama Wholesale Nursery	150	1025 N. Todd Avenue, Azusa	15.30	8/8/07	9/25/0	7 12/7/0	7 ns ⁴	8/12/08	9/23/0	08 <b>11/26/0</b>	8 12/15/	08 10/12/0	ns*	8/18/	10 ns	*	3/21/11	10/12/11	1		8/28/12					nv		12/2/1	4		10/2/15		9/20/16	IP	IP
	West Covina Wholesale-Damien	189	3424 Damien Ave, La Verne	1.25	8/8/07	9/25/0	7 1/4/08	ns ⁴	8/12/08	9/23/0	08 11/26/0	8 12/15/	08 10/12/0	ns*	8/18/	10 ns	*		10/12/11	1		8/28/12					nv		12/2/1	4		10/2/15			IP	IP
	Coiner Nursery	31	285 San Fidel, La Puente	48.00	8/21/07	9/28/0	7 ns ⁴	ns ⁴	8/12/08	9/23/0	08 11/26/0	8 12/15/	08 10/12/0	ns*	8/18/	10 ns	*			3/17/12		9/26/12		10/10/1	3	2/28/145				5/15/15			1/15/16		IP	IP
UP 3	H&H Nursery of Lakewood	64	6220 Lakewood Boulevard, Lakewood	2.50	8/21/07	9/28/0	7 1/23/0	8 ns ⁴	8/12/08	9/25/0	08 11/26/0	8 12/15/	08 10/13/0	ns*	8/17/	10 ns	*			3/17/12		9/26/12		10/10/1	3					5/15/15			1/15/16		IP	IP
GRO	Centeno's Nursery and Landscaping	81	6850 Paramount Blvd., Long Beach	3.00																	5/15/15			1/15/16		IP	IP									
	SY Nursery Inc.	168	19900 S Pioneer Blvd, Cerritos	4.75	8/13/07	9/28/0	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*         1         3/17/12         9/26/12         9/26/12         10/10/12           127/07         1/23/08         9/24/08         11/26/08         12/15/08         10/12/09         ns*         8/17/10         ns*         3/21/11         0         9/26/12         10         10/10/12												3					5/15/15			1/15/16	9/2/16	IP	IP						
	ABC Nursery, Inc.	4	424 E. Gardena Boulevard, Gardena	11.51	8/9/07	9/24/0	7 12/7/0	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*         1           127/07         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           121/807         1/23/08         8/12.08         9/24.08         11/26.08         12/15.08         10/13.09         ns*         8/17/10         ns*         3/21/11													3/25/12	1/25	25/13		10/11/13	;		10/8/14					nv	9/2/16	IP	IP
UP 4	G Hernandez-New Westgrowers	53	1601 S. Santa Fe Ave, Compton	1.70	8/9/07	9/24/0	7 12/18/0	11/2007         1/25/08         8/12/08         9/24/08         11/26/08         12/15/08         10/13/09         ns*         8/17/10         ns*           12/707         1/23/08         8/13/08         9/24/08         11/26/08         12/15/08         10/13/09         ns*         8/17/10         ns*           12/18/07         1/23/08         8/12/08         9/24/08         11/26/08         12/15/08         10/13/09         ms*         8/17/10         ns*           12/18/07         ns ⁴ 8/13/08         9/24/08         11/26/08         12/15/08         10/13/09         ms*         8/17/10         ns*           12/18/07         ns ⁴ 8/13/08         9/24/08         11/26/08         12/15/08         10/13/09         ms*         8/17/10         ns*													3/25/12	1/25	25/13		10/11/13	;		10/8/14					nv		IP	IP
GRO	T-Y Nursery	176	Between Paulina/Prospect, Redondo Beach	7.50	8/9/07	9/24/0	7 12/18/0	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         1           12/7/07         1/23/08         8/13/08         9/24/08         11/26/08         12/15/08         10/13/09         ns*         8/17/10         1           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         1           12/18/07         ns ⁴ 8/13/08         9/24/08         11/26/08         12/15/08         10/13/09         ns*         8/17/10         1           12/18/07         ns ⁴ 8/13/08         9/24/08         11/26/08         12/15/08         10/13/09         ns*         8/17/10         1           1inclued as ampling location.         III/26/08         12/15/08         10/13/09         ns*         8/19/10         1													3/25/12				10/11/13	;		10/8/14					nv	9/2/16	IP	IP
	Church Estate Vinyard	210	6415 Busch Drive, Malibu	2.75		Si	e not included	l as a samplin	g location.		11/26/0	8 12/15/	08 10/13/0	ns*	8/19/	10 ns	*				3/25/12				10/11/13	;		10/8/14					nv		IP	IP
	Canyon Way Nursery	26	11745 Sherman Way, Studio City	4.25							Site not in	cluded as a	ampling location.													2/28/14									IP	IP
	Color Spot Nurseries, Inc.	33	321 W. Sepulveda Blvd., Carson	18.50							Site not in	cluded as a	ampling location.												10/11/13	;									IP	IP
	Carreon Nursery	50	7900 La Merced Road, Rosemead	6.00							Site not in	cluded as a	ampling location.									9/26/12													IP	IP
Sati	Live Art Plantscapes, Inc.	105	18809 Plummer St, Northridge	1.80							Site not in	cluded as a	ampling location.						10/11/11																IP	IP
SILES	Sakaida Nursery	158	8601 Longden Ave., San Gabriel	6.89							Site not in	cluded as a	ampling location.																10/17/14					9/20/16	IP	IP
SAM	West Covina Wholesale-Damien	188	1340 Puddingstone Dr., La Verne	15.25							Site not in	cluded as a	ampling location.																12/2/1	4					IP	IP
ING	El Nativo Growers	202	200 S. Peckham Azusa, CA	7.00							Site not in	cluded as a	ampling location.																					9/2/16	IP	IP
OTAT	Worldwide Exotics	204	11157 Orcas Ave., Lake Terrace	2.00							Site not in	cluded as a	ampling location.																		9/30/15				IP	IP
~	Lam Farms	212	8600 Jefferson, Paramount	1.00							Site not in	cluded as a	ampling location.																				1/15/16		IP	IP
	Choji Matsishita	226	724 N. Cataract Av., San Dimas	1.70							Site not in	cluded as a	ampling location.																			10/2/15			IP	IP
	ABC Rhubarb	261	6208 Clara St., Bell Gardens	5.00							Site not in	cluded as a	ampling location.																	5/15/15					IP	IP
	Acosta Growers Inc.	13	16412 Wedgeworth Dr, Hacienda Hights	4.50	8/8/07	9/24/0	7 12/18/0	7 ns ⁴	8/13/08	9/24/0	08 11/26/0	8 12/15/	08 10/12/0	ns*	8/18/	10 ns	*		10/12/11	1		8/28/12				<b>I</b>	1		ite no longer in opera	ion.	JL	1			IP	IP
	Brothers Nursery, Inc.	20	Cerritos & Newburgh St, Azusa	2.98		1			1	-1	Site not in	cluded as a	ampling location.	1					10/12/11	1								5	ite no longer in opera	ion.					IP	IP
	Carlos Soto, Jr^	25	600 W. Alondra Blvd, Gardena	3.50	8/9/07	9/24/0	7 ns ⁴	ns ⁴	8/13/08	9/25/0	08 11/26/0	8 12/15/	08 10/11/0	ns*	8/19/	10 ns	*		L I		-	<u> </u>	I	Site n	o longer in ope	ration.									IP	IP
SITES	Norman's Nursery-Ramona	122	12500 Ramona Blvd, Baldwin Park	39.93		1			-		Site not in	cluded as a	ampling location.	1			1			3/17/12		9/26/12						5	ite no longer in opera	ion.					IP	IP
ING 6	Norman's Nsy-Rosemead^	130	475 Rosemead Blvd, S. El Monte	16.56	8/6/07	9/24/0	7 12/7/0	7 1/24/08	8 8/13/08	9/24/0	08 11/26/0	8 12/15/	08 10/13/0	ns*	8/19/	10 ns	*		L		1	<u>n I I</u>	I	Site n	o longer in ope	ration.									IP	IP
IMIN	San Gabriel Nursery & Florist	162	2015 Potrero Grande, Monterey Park	6.00		1					Site not in	cluded as a	ampling location.							3/17/12				10/10/1	3								Lot Sold		IP	IP
ED S	Toro Nursery Inc.	170	17585 Crenshaw Blvd, Torrance	15.78							Site not in	cluded as a	ampling location.								3/25/12	1/24	25/13									Unk	nown		IP	IP
UNIL	Valley Crest Tree Company ^	182	16202 Yarnell St. and 16222 Filbert St, Sylmar	16.00	8/21/07	9/25/0	7 12/7/0	7 1/24/08	8										L						-	-1	-1	1 1							IP	IP
CON	Valley Sod Farms, Inc. ^	183	6301 Balboa Boulevard, Encino	60.00	8/6/07	9/26/0	7 12/18/0	07 1/5/08																											IP	IP
)IQ	Malibu Vineyard	221	3222 Rambla Pacifica, Malibu	2.00							Site not in	cluded as a	ampling location.															10/8/14				Unk	nown		IP	IP
	Schoelkopf Vineyard^	224	31499 Pacific Coast Highway, Malibu	0.80		Si	e not included	1 as a samplin	g location.		11/26/0	8 12/15/	08 10/11/0	ns*	8/19/	10 ns	*		II			<u>n I I</u>		Site n	o longer in ope	ration.	1	1							IP	IP
	ABC Rhubarb	261	6208 Clara St., Bell Gardens	5.00							Site not in	cluded as a	ampling location.																	5/15/15		Site no longe	r in operation.		IP	IP
1	L	1	1		I				IS NATIONALIS NATION															1 1												

Not sampled due to minimal rainfall and/or no runoff observed during sampling event. No sampling activities were conducted Not visited, no storm event sufficient to trigger sampling. In Progress Sample Collected

 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.
 nv

 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
 IP

 faith measure, the LALIG 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.
 IP

 4
 Site visited on multiple dates during multiple storms
 5

 5
 Sample collected for Council of Watershed Health
 6

 6
 Event #1 aborted early due to lack of rain
 Event #1

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

								Ge	eneral Chem	istry					
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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	1.109	35	470	1.7	1,100	1.109	8.4	1200	500	200	0.110
NGA #31	LAILG-NGA31-4	3/17/12	1.1	55	1.009	12	160	0.90	520	1.0 ⁰⁹	2.0	81	240	95	0.027
NGA #162	LAILG-NGA162-1	3/17/12	0.16	35	0.96 ⁰⁹	5.9	120	0.95	350	0.96 ⁰⁹	1.0	5	140	57	0.014
NGA #64	LAILG-NGA64-3	3/17/12	0.79 ^{FD}	5.8	0.28 ⁰⁹	0.70 ^{FD}	8.4	0.32	57	0.28 ⁰⁹	1.5 ^{FD}	500 ^{FD}	51	21	0.047
Duplicate	LAILG-NGA-DUP	3/17/12	0.60	5.4	0.25 ⁰⁹	1.3	8.6	0.27	46	0.25 ⁰⁹	1.1	380	44	18	0.049
Equip Blank	LAILG-NGA-EB	3/17/12	nd	nd	nd ⁰⁹	nd	nd	nd	nd	nd ⁰⁹	nd	nd	nd	nd	0.00073
Field Blank	LAILG-NGA- FB	3/17/12	nd	nd	nd ⁰⁹	nd	nd	nd	nd	nd ⁰⁹	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.

09

MS-02

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

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

Estimated concentration due to sample collection via peristaltic pump р

This sample was received with the EPA recommended holding time expired. MS-01

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

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.

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

								Ge	eneral Chem	istry					
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho		TSS	CA Hardness, as CaCO3	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	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. **

MRL

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.

Method Reporting Limit

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

								G	eneral Chem	istry					
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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	7					
	MRL			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. ** The recommended holding time for filtering is only 15 minutes. The sample was filtered as soon as possible but was filtered past holding time.

MRL

CWIL Conditional waiver for irrigated lands

EB Estimated concentration, constituent detected at greater than 10% in equipment blank However, the sample was analyzed within holding time. 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 5 CONTINUATION GENERAL CHEMISTRY NURSERY GROWERS ASSOCIATION LOS ANGELES IRRIGATED LANDS GROUP

								G	eneral Chem	istry					
Site	Sample #	Date	Ammonia	Chloride	Diss Ortho	Nitrate	Sulfate	Diss Phos	TDS	Total Ortho	Total Phos	TSS	CA Hardness, as CaCO3	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	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. **

MRL

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%.

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

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.

Method Reporting Limit

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

							General (	Chemistry				
Site	Sample #	Date	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 FBLI	NGA-LAILG-FBLI	8/21/07	0.01 ^J	nd	nd	0.016 ^J	nd	nd	nd	nd	nd	nd
NGA EQBLI	NGA-LAILG-EQBLI	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 #EQUIE	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 #EQUIE	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 Ta	able 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

- Estimated concentrations, since KFD of dupincate is 225.76 Procedural blank Matrix Spike recovery out of limits ESTIMATED CONCENTRATION, matrix spike does not meet acceptance criteria Sulfate detected in lab blank, at 1.09 mg/L. Estimated concentrations, results above MDL but less than RL
- E F J

CWIL Conditional waiver for irrigated lands

**В** С Estimated concentration, since RPD of duplicate is >25%

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

							General C	Chemistry				
Site	Sample #	Date	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	<b>28.34</b> ^{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			0.52	8.67 ^{EB}	1.0382	2.7	15.23	0.158	238 ^{EB}	2.33	2.231	295
	CWIL Limits						See Ta	able X				
	MDL		0.01	0.01	0.0075	0.01	0.01	0.016	0	0.01	0.016	0.5
	MDL RL			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

Н M3 Estimated concentration, constituent detected at greater than 10% in equipment blank

Estimated concentration. Field Duplicate RPD >25%. Estimated concentration, constituent detected at greater than 10% in field blank

Sample received and /or analyzed past the recommended holding time. Q1

Detection of the analyte was difficult due to matrix interference.

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.

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

EB FD FB

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

											Chlorinated	Pesticides							
Site	Sample #	Date	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	<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	<25
Duplicate	LAILG-NGA-DUP	1/5/16	<25	<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	<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	<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 estimated

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

Water Quality Benchmarks Method Reporting Limits not listed

WQB MRL

nl

CWIL

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

											Chlorinated	Pesticides							
Site	Sample #	Date	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-I
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	<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	<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	<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	<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	<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	<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

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

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

M-04

CWIL WQB MRL

Water Quality Benchmarks Method Reporting Limits

nl

not listed

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

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

											Chlorinated	Pesticides							
Site	Sample #	Date	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	<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	<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	<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	<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	<25
Duplicate	LAILG-NGA-DUP	2/28/14	<25	<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	<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	<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 estimated

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

WQB MRL Water Quality Benchmarks Method Reporting Limits

not listed nl

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

											Chlorinated	Pesticides							
Site	Sample #	Date	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	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	nd	nd	33 ^{FD}	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	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	nd
Duplicate	LAILG-NGA-DUP	3/21/11	nd	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	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
NGA #168	LAILG-NGA168-6	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BSL}	nd
NGA #31	LAILG-NGA31-4	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BSL}	nd
NGA #162	LAILG-NGA162-1	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BSL}	nd
NGA #64	LAILG-NGA64-3	3/17/12	nd	nd	nd	nd	28 ^{FD}	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BSL}	nd
Duplicate	LAILG-NGA-DUP	3/17/12	nd	nd	nd	nd	51	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BSL}	nd
Equip Blank	LAILG-NGA-EB	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BSL}	nd
Field Blank	LAILG-NGA- FB	3/17/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BSL}	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	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	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	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	nd
Duplicate	LAILG-NGA-DUP	3/25/12	nd	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	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	nd
	CWIL Limits		nl	0.59	nl	0.84	0.59	0.59	nl	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 estim

**S**4

SGC

CWIL

Conditional waiver for irrigated lands, order #R4-2005-0080 Estimated concentration. Field Duplicate RPD >25%. Estimated concentrations, results above MDL but less than RL FD

J MDL

Method Detection Limits

- RL Reporting Limits
- nd not detected nl
  - not listed

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

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

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

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

											Chlorinated	Pesticides							ī
Site	Sample #	Date	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	nd
NGA #189	LAILG-NGA189-1	1/4/08	nd	nd	nd	nd	22.5	nd	nd	nd	nd	nd	nd	nd	6	nd	nd	nd	nd
NGA #19	LAILG-NGA19-3	1/5/08	nd	nd	nd	nd	nd	5.6	nd	nd	nd	nd	nd	2.3 ^J	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	12	26.5	nd	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	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	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	nd
NGA # 19	LAILG-NGA19-4	8/12/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.0 ^J	2.1 ^J	nd	nd	nd	nd
NGA # 4	LAILG-NGA 4-3	8/13/08	nd	nd ^{M4}	nd	nd	nd	nd	nd	nd	nd ^{M4}	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}	44.3 ^{FD}	nd	1064.3 ^{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	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	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 ^{J,Q3}	6.1	nd	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	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	19.3	nd	nd	nd	nd	nd	nd	3.7 ^J	2.8 ^J	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	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	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 ^J	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	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	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	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	nd	nd
NGA # 184	LAILG-NGA 184-2	12/15/08	nd	nd	nd	nd	22	nd	nd	nd	nd	nd	nd	nd	4.2 ^J	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	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	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	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	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	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	1	5	50	1
	RL		5	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 estim

M4

not detected nd nl not listed

Q1 concentration. Q2

MDL.

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

Spike or surrogate compound recovery was out of control due to matrix interference. The associated method blank spike or Q3

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

surrogate compound was in control and therefore the sample data was reported without further clarification.

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

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

Conditional waiver for irrigated lands, order #R4-2005-0080 Estimated concentration. Field Duplicate RPD >25%. Estimated concentrations, results above MDL but less than RL CWIL FD

J Method Detection Limits

MDL Reporting Limits

RL

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

			1								Chlorinated	Pesticides							i
Site	Sample #	Date	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	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	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
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	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
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
NGA EQBLI	NGA-LAILG-EQBLI	8/21/07	nd	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	nd ^D	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	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	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
NGA #FIELD	ILGNGA-#FIELD-2	9/28/07	nd	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	<b>84</b> ^D	nd	nd	nd	nd	nd	nd	nd	nd	nd	52 ^J	nd
NGA #168	NGA-#168-LAILG-3	11/30/07	nd	nd	nd	nd	2.7 ^J	nd ^C	nd	nd	nd	nd	nd	1.4 ^J	1.4 ^J	1.1 ^J	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
NGA #182-DUP	NGA-Duplicate	12/7/07	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	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	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	nd
NGA #124	NGA-#124-LAILG-2	12/7/07	nd	nd	nd	6.0	22.1	9.3	nd	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	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
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	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	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	nd
NGA #13	LAILG-NGA#13-1	12/18/07	nd	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	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	1	5	50	1
	RL		5	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 estim

Method Detection Limits Reporting Limits not detected not listed not analyzed

CWIL	Conditional waiver for irrigated lands, order #R4-2005-0080	MDL
Α	Component of total chlordane, see total chlordane for CWIL limitations	RL
В	Estimated concentration, RPD of duplicate sample >25%	nd
С	Procedural blank Matrix Spike recovery out of limits	nl
D	Procedural blank Matrix Spike Duplicate RPD out of limits	na
J	Estimated concentrations, results above MDL but less than RL	

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

								Chlorinated I	Pesticides						Sampla
Site	Sample #	Date	Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Chlordane (tech)	Heptachlor	Heptachlor Epoxide	Methoxychlor	Mirex	Toxaphene	trans- Nonachlor	cis-Nonachlor	Total Chlordane	Sample Notes
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

M-04

CWIL WQB MRL Conditional waiver for irrigated lands, order #R4-2005-0080 Water Quality Benchmarks Method Reporting Limits

nl not listed Due to the nature of marix interfrenences, 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

								Chlorinated I	Pesticides						Sample
Site	Sample #	Date	Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Chlordane (tech)	Heptachlor	Heptachlor Epoxide	Methoxychlor	Mirex	Toxaphene	trans- Nonachlor	cis-Nonachlor	Total Chlordane	<b>^</b>
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	

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

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

M-04

CWIL WQB MRL

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

 QB
 Water Quality Benchmarks

 LL
 Method Reporting Limits

MRL

nl not listed

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

								Chlorinated I	Pesticides						Sample
Site	Sample #	Date	Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Chlordane (tech)	Heptachlor	Heptachlor Epoxide	Methoxychlor	Mirex	Toxaphene	trans- Nonachlor	cis-Nonachlor	Total Chlordane	Notes
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			<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

M-04

Conditional waiver for irrigated lands, order #R4-2005-0080 Water Quality Benchmarks Method Reporting Limits

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

CWIL WQB MRL

nl not listed

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

							Chlorina	ted Pesticides					
Site	Sample #	Date	Aroclor XXXX, Sum of	Endrin	Endrin Aldehyde	Endrin Ketone	Heptachlor	Heptachlor Epoxide	Methoxychlor	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	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	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 not deemed to be qualified as estim

S4

SGC

BS-L

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

- MDL Method Detection Limits Estimated concentrations, results above MDL but less than RL
- J
- RL Reporting Limits not detected
- nd nl

FD

not listed Estimated concentration. Field Duplicate RPD >25%. The recovery of this analyte in the BS/LCS was below the control limit. Sample result is suspect.

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

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

Site	Sample #	Date	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	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	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	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	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	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	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	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	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	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	nd
NGA # 19	LAILG-NGA19-4	8/12/08	nd	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	nd ^{M4}	nd	nd	nd	nd ^{M4}	nd ^{M4}	nd	7.1 ^{M4,Q2,FD}	38.8
Duplicate	LAILG-NGA-DUP	8/13/08	nd	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	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	nd	8.5	20.1
NGA # 19	LAILG-NGA 19-5	11/26/08	nd	nd	nd	nd	nd	339.4 ^{Q3}	nd	nd	nd	nd	nd	nd	nd	nd	6.6 ^{J,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	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	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	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	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 ^{Q6}	nd	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	nd
NGA # 124	LAILG-NGA 124-5	12/15/08	nd	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	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	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	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	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	nd
NGA # 178	LAILG-NGA 178-1	12/15/08	nd	nd ^{M4}	nd ^{M4}	nd	nd	nd	nd	nd	nd ^{M4}	nd	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	nd
NGA # 64	LAILG-NGA 64-2	12/15/08	nd	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	nd
NGA # 4	LAILG-NGA 4-4	12/15/08	nd	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	1	5	10	1	1
	RL		5	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

M4

Q2

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

- MDL Method Detection Limits Estimated concentrations, results above MDL but less than RL J
- Reporting Limits
- RL nd not detected
- not listed
- nl FD Estimated concentration. Field Duplicate RPD >25%.

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

Q6

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.

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

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

Site	Sample #	Date					Endrin	Endrin		Heptachlor							trans-	Total
Site	Sample #	Date	Endosulfan Sulfate	Endosulphan-I	Endosulfan-II	Endrin	Aldehyde	Ketone	Heptachlor	Epoxide	Methoxychlor	Kepone	Mirex	Oxychlordane	Perthane	Toxaphene	Nonachlor	Chlordane
NGA #130	NGA-#130-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd
NGA #183	NGA-#183-LAILG-1	8/6/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd
NGA #19	NGA-#19-LAILG-1	8/13/07	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd
NGA #124	NGA-#124-LAILG-1	8/13/07	nd	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	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	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
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	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	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	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	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	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	nd ^C	nd	nd	nd	nd	nd	1.7 ^J	<b>5.6</b> ^J
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	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	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	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 ^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	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	nd ^C	nd	nd	nd	nd	2.4 ^J	2.4 ^J
NGA #13	LAILG-NGA#13-1	12/18/07	nd	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	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	1	5	10	1	1
	RL		5	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, order #R4-2005-0080	MDL
А	Component of total chlordane, see total chlordane for CWIL limitations	RL
В	Estimated concentration, RPD of duplicate sample >25%	nd
С	Procedural blank Matrix Spike recovery out of limits	nl
D	Procedural blank Matrix Spike Duplicate RPD out of limits	na
J	Estimated concentrations, results above MDL but less than RL	

Method Detection Limits Reporting Limits not detected not listed not analyzed

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

													Orga	nophosphorus I	Pesticides												Sampla
Site	Sample #	Date	Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Merphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion	Trichloronate	e Notes
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	<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	<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	<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	<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	<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	nl	
	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 BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

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

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

													Org	anophosphorus	Pesticides												Sample
Site	Sample #	Date	Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Merphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion	Trichloronate	
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	<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	<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	<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	<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	<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	<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	nl	
	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 BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

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

Conditional waiver for irrigated lands, order #R4-2005-t Method Detection Limits Water Quality Benchmarks Estimated concentration. Field Duplicate RPD >25%. not listed not detected

CWIL MRL WQB ! nl nd

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

													Org	ganophosphorus	Pesticides												Sample
Site	Sample #	Date	Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Merphos	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	<10	
NGA #26	LAILG-NGA26-1	2/28/14	<10	<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	<10	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	$\square$
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	<10	$\square$
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	<10	$\square$
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	<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	<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	<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	nl	
	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 BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be

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

CWIL MRL WQB ! nl nd

not detected

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

													Org	nophosphorus P	esticides												Sample
Site	Sample #	Date	Azinphos methyl	Bolstar	Chlorpyrifos	Coumaphos	Demeton-o	Demeton-s	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Ethyl parathion	Fensulfothion	Fenthion	Malathion	Merphos	Methyl Parathion	Mevinphos	Naled	Phorate	Ronnel	Stirophos	Tokuthion	Trichloronate	
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	nd	7300 ^{E1}	nd	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	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	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	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	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	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	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	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	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	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 #162	LAILG-NGA162-1	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	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 #64	LAILG-NGA64-3	3/17/12	nd ^{BS-03}	nd	nd	nd	nd	nd	nd	nd	nd ^{MS-05}	nd	nd	nd	nd ^{MS-05}	nd	nd	nd	nd	nd	nd	nd	nd	nd ^{BS-03}	nd	nd	
Duplicate	LAILG-NGA-DUP	3/17/12	nd ^{BS-03}	nd		nd ^{Q-08,A-01}	nd	nd	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	
Equip Blank	LAILG-NGA-EB	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	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	
Field Blank	LAILG-NGA- FB	3/17/12	nd ^{BS-03}	nd	nd	nd ^{Q-08,A-01}	nd	nd	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 #4	LAILG-NGA4-6	3/25/12	nd ^{BS-03}	nd	44,000	nd ^{BS-03}	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 ^{Q-08}	nd ^{BS-03}	nd	nd ^{BS-03}	nd	nd	nd ^{BS-03}	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	nd ^{MS-05}	nd ^{Q-08}	nd	nd	nd ^{Q-08}	nd ^{MS-05}	nd	nd ^{Q-08,A-01}	nd	nd	14 ^{BS-03}	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	nd ^{MS-05}	nd ^{Q-08}	nd	nd	nd ^{Q-08}	nd ^{MS-05}	nd	nd ^{Q-08,A-01}	nd		nd ^{BS-03}	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	nd ^{MS-05}	nd ^{Q-08}	nd	41	nd ^{Q-08}	nd ^{MS-05}	nd	nd ^{Q-08,A-01}	nd	nd	nd ^{BS-03}	nd	nd	
Duplicate	LAILG-NGA-DUP	3/25/12	nd ^{BS-03}	nd	42,000			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 ^{Q-08}	nd ^{BS-03}	nd	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd	nd	
Equip Blank	LAILG-NGA-EB	3/25/12	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd ^{BS-03}	nd ^{BS-03}	nd ^{Q-12}	nd	nd ^{MS-05}	nd	nd	nd	nd ^{Q-08,BS-03}	nd	nd ^{Q-08,A-01a}	nd ^{Q-08}	nd ^{BS-03}	nd	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd	nd	
Field Blank	LAILG-NGA- FB	3/25/12	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd ^{BS-03}	nd ^{BS-03}	nd ^{Q-12}	nd	nd ^{MS-05}	nd	nd	nd	nd ^{Q-08,BS-03}	nd	nd ^{Q-08,A-01a}	nd ^{Q-08}	nd ^{BS-03}	nd	nd ^{BS-03}	nd	nd	nd ^{BS-03}	nd	nd	
	CWIL Limits		nl	nl	25	nl	nl	nl	100	nl	nl ⁽¹⁾	nl ⁽¹⁾	nl ⁽¹⁾	nl	nl	nl	nl ⁽¹⁾	nl	nl (1)	nl	nl	nl ⁽¹⁾	nl	nl	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	10	

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

Method Detection Limits MDL

RL FD Reporting Limits Estimated concentration. Field Duplicate RPD >25%.

nl nd (1) not listed

not detected

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

E1

S4 Q-08 A-01

s are for reference purposes; data was not deemed to be The concentration indicated for this analyte is an estimated value above the calibration range. The surrogate recovery for this sample is outside of established control limits due to possible sample matrix effect. High bias in the QC sample does not affect sample result since analyte was not detected or below the reporting limit. High bias in MS and MSD.However, Il-ccv has an acceptable recovery. The batch was accepted since all samples were ND for this analyte. Low recovery in BS and high recoveries in both MSMSD.However, LL-ccv has an acceptable recovery. The batch was accepted since samples were either ND or yielded very high results. The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample recovery indicating that the sample result might be accurately reported as non-detect. The acrosume and/or RPD ware curricle accentatione limits for the MSD addue to possible matrix interference. The LCS and/or LCS and/or

A-01 A-01a Q-12 Q-02 MS-05 BS-L The spike recovery and on 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

								-		-	Org	anophosphorus	Pesticides		-			-			
Site	Sample #	Date	Bolstar	Chlorpyrifos	Demeton	Diazinon	Dichlorvos	Dimethoate	Disulfoton	Ethoprop	Fenchlorphos	Fensulfothion	Fenthion	Malathion	Merphos	Methyl Parathion	Mevinphos	Phorate	Tetrachlorvin phos	Tokuthion	Trichloronate
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	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	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	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	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	nd	nd
NGA #4	LAILG-NGA4-2	1/23/08	nd	153.8	nd	2,212.1	nd	nd	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	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	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	nd	nd
NGA #182	LAILG-NGA182-2	1/24/08	nd	nd	nd	nd	nd	13.3	nd	nd	nd	nd	nd	19.9	nd	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	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	nd	nd
NGA # 4	LAILG-NGA 4-3	8/13/08	nd ^{M4}	nd ^{M4}	nd ^{M4}	6,058.9 ^{Q1,Q2,FD}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	<b>1,148,630</b> ^{Q1}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}	nd ^{M4}
Duplicate	LAILG-NGA-DUP	8/13/08	nd	nd	nd	13586.8 ^{FD}	nd	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	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	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	nd	nd
NGA # 210	LAILG-NGA 210-1	11/26/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	56.4	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	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	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	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	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	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	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	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	nd	nd
NGA # 124	LAILG-NGA 124-5	12/15/08	nd	21	nd	98.5	nd	nd	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	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	nd	nd
NGA # 31	LAILG-NGA 31-3	12/15/08	nd	44.5	nd	nd	nd	nd	nd	nd	nd	nd	nd	3,433.9	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	nd	nd
NGA # 130	LAILG-NGA 130-5	12/15/08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	85.2	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	nd ^{M4}	nd	nd	nd	nd	nd	nd	nd ^{M4}	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	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	nd	nd
NGA # 168	LAILG-NGA 168-5	12/15/08	nd	nd	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	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	nl ⁽¹⁾	nl	nl ⁽¹⁾	nl	nl (1)	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 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

M4

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

CWIL MDL RL FD nl nd (1)

Method Detection Limits Reporting Limits Estimated concentration. Field Duplicate RPD >25%. not listed

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

Spike or surrogate compound recovery was out of control due to matrix interference. The associated method blank ql spike 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.

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

Income         Long         Congryme         Deameding         Diametione         Diametione	Tetrachlorvin     Tokuth       phos     nd       nd     nd	nd nd nd nd
NGA #183NGA.#183-LAILG-18607ndndndndndndndndndndndndndndndndNGA #19NGA.#19-LAILG-18/1307ndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndnd<	ndndndndndndndndndndndndndndndndndndndndndndndnd	nd nd nd nd
NGA #19         NGA #19-LAILG-1 $813.07$ nd         nd <t< td=""><td>nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd</td><td>nd nd n</td></t<>	nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd	nd n
NGA #124NGA #124-LALLG-18/1307ndndndndndndndndndndndndndndndndndNGA #168NGA-#168-LALLG-18/1307ndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndnd </td <td>ndndndndndndndndndndndndndndndnd</td> <td>nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd</td>	ndndndndndndndndndndndndndndndnd	nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd nd
NGA #168NGA #168-LAILG-18/1307ndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndnd </td <td>nd nd nd nd nd nd nd nd nd nd nd nd nd nd</td> <td>nd nd nd nd nd nd nd nd nd nd nd nd nd nd</td>	nd nd nd nd nd nd nd nd nd nd nd nd nd nd	nd nd nd nd nd nd nd nd nd nd nd nd nd nd
NGA BLANKNGA LAILG-BLANK-18/13/7ndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndnd	nd nd nd nd nd nd nd nd nd nd nd nd	nd nd nd nd nd nd nd nd nd nd nd nd
NGA FBLINGA-LAILG-FBLI8/21/07ndndndndndndndndndndndndndndndndndNGA EQBLINGA-LAILG-EQBLI8/21/07ndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndnd </td <td>nd nd nd nd nd nd nd nd nd nd</td> <td>nd nd nd nd nd nd nd nd</td>	nd nd nd nd nd nd nd nd nd nd	nd nd nd nd nd nd nd nd
NGA EQBLNGA-LAILG-EQBL18/21/7IndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndIndInd <td>nd nd nd nd nd nd nd nd</td> <td>nd nd nd nd nd nd</td>	nd nd nd nd nd nd nd nd	nd nd nd nd nd nd
NGA #150         NGA-#150-LAILG         9/25/07         nd         nd <th< td=""><td>nd nd nd nd nd nd</td><td>nd nd nd nd</td></th<>	nd nd nd nd nd nd	nd nd nd nd
NGA #183         ILG-#183         9/26/07         nd         nd         nd         nd         nd ^D nd         nd ^D nd         nd ^D nd ^D nd ^D nd ^D nd ^D nd ^D nd         nd ^D nd ^D nd ^D nd         nd ^D nd         nd ^D nd         nd ^D nd	nd nd nd nd	nd nd
IAG #183-DUILGNGA.#Dup9/26/07ndndndndndndndndndndndndndndndndndndNGA #EQUPILGNGA.#Equip9/26/07ndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndnd <td>nd nd</td> <td></td>	nd nd	
NGA #Equip9/26/7ndndndndndndndndndndndndndndndndndndndNGA #FEQUPILGNGA.#FELD-29/28/7ndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndnd <td></td> <td></td>		
NGA #Equip9/26/7ndndndndndndndndndndndndndndndndndndndNGA #FEQUPILGNGA.#FELD-29/28/7ndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndndnd <td>nd nd</td> <td>nd nd</td>	nd nd	nd nd
NGA #168-2         ILGNGA.#168-2         9/28/07         nd         nd <t< td=""><td>iid iid</td><td>nd nd</td></t<>	iid iid	nd nd
NGA #168         NGA #168-LAILG-3         11/30/7         nd         nd <t< td=""><td>nd nd</td><td>nd nd</td></t<>	nd nd	nd nd
NGA #182         NGA #182-LAILG-1         12/1/07         nd         nd <t< td=""><td>nd nd</td><td>nd nd</td></t<>	nd nd	nd nd
Image: GA #182-DU         NGA-Duplicate         12/7/07         nd	nd nd	nd nd
NGA #4         NGA #4-LAILG-1         12/7/07         nd         1,122.6         nd         175.2         11.3         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
NGA #150 NGA #150-LAILG-2 12/7/07 nd	nd nd	nd nd
NGA #124 NGA-#124-LAILG-2 12/7/07 nd	nd nd	nd nd
NGA #EQUIP NGA-equip blank 12/7/07 nd	nd nd	nd nd
NGA #FIELD Field Blank-2 12/18/07 nd	nd nd	nd nd
NGA #176 NGA-#176-LAILG-1 12/18/07 nd	nd nd	nd nd
NGA #183 LAILG-NGA#183-3 12/18/07 nd	nd nd	nd nd
NGA #19 LAILG-NGA#19-2 12/18/07 nd nd nd nd 15 nd	nd nd	nd nd
NGA #13 LAILG-NGA#13-1 12/18/07 nd	nd nd	nd nd
NGA #53 LAILG-NGA#53-1 12/18/07 nd	nd nd	nd nd
CWILLimits nl 25 nl 100 nl		nl nl
MDL         2         1         1         2         3         3         1         1         2         1         2         3         1         1         8         6	nl nl	3 1
RL 4 2 2 4 6 6 2 2 4 2 4 6 2 2 16 12	nl nl 2 3	6 2

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

Conditional waiver for irrigated lands, order #R4-2005-0080 Procedural blank Matrix Spike Duplicate RPD out of limits not listed

CWIL D nl

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

									Pyrethroid	Pesticides							
Site	Sample #	Date	Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin /Tralomethrin	Dichloran	Fenpopathrin (Danitol)	Fenvalerate /Esfenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Telfluthrin	Sample Notes
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	<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 in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estim

Conditional waiver for irrigated lands, order #R4-2005-0080 Water Quality Benchmark not listed CWIL

WQB nl

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 4 **PYRETHROID PESTICIDES** NURSERY GROWERS ASSOCIATION LOS ANGELES IRRIGATED LANDS GROUP

									Pyrethroid	Pesticides							
Site	Sample #	Date	Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin /Tralomethrin	Dichloran	Fenpopathrin (Danitol)	Fenvalerate /Esfenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Telfluthrin	Sample Notes
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	<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	<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 in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estim M-04

S-GC

CWIL WQB nl

Conditional waiver for irrigated lands, order #R4-2005-0080 Water Quality Benchmark not listed

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 3 **PYRETHROID PESTICIDES** NURSERY GROWERS ASSOCIATION LOS ANGELES IRRIGATED LANDS GROUP

									Pyrethroid	Pesticides							
Site	Sample #	Date	Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin /Tralomethrin	Dichloran	Fenpopathrin (Danitol)	Fenvalerate /Esfenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Telfluthrin	Sample Notes
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 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

WQB nl

Conditional waiver for irrigated lands, order #R4-2005-0080 Water Quality Benchmark 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

									Pyrethroid I	Pesticides							Sample
Site	Sample #	Date	Allethrin	Bifenthrin	Cyfluthrin	Cypermethrin	Deltamethrin	Dichloran	Esfenvalerate	Fenvalerate	L-Cyhalothrin	Pendimethalin	Permethrin	Prallethrin	Sumithrin	Telfluthrin	Notes
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 in BOLD. Footnotes in BOLD indicate estimated concentration. All other footnotes are for reference purposes; data was not deemed to be qualified as estim

A-01a

CWIL	Conditional waiver for irrigated lands, order #R4-2005-0080	E1
FD	Estimated concentration. Field Duplicate RPD >25%.	S4
nl	not listed	Q-12

nd not detected

Although no discharge limits were set in the CWIL, the US EPA has set an aquatic life benchmark BS-L (1) for this constituent. See Table 8. BS-03

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

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

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. 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

								Р	yrethroid Pestici	des					
Site	Sample #	Date	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,<b>FD</b>}	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 ^{J,M4,Q3,EB}	274.4 ^{M4}	10.2 ^{M4,<b>FB</b>}	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 ^{J,EB}	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 ^{J,EB}	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 ^{J,EB}	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 ^{J,EB}	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 ^{J,EB}	4.4 ^{EB,FB}	nd	nd	nd	nd
NGA # 110	LAILG-NGA 110-2	12/15/08	nd	55.2	nd	nd	nd	nd	nd	0.5 ^{J,EB}	11.5 ^{EB,FB}	nd	nd	nd	nd
NGA # 31	LAILG-NGA 31-3	12/15/08	nd	nd	nd	nd	48.5	nd	nd	0.9 ^{J,EB}	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 ^{J,EB}	nd ^{Q3}	1.7 ^{J,EB,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 ^{J,EB}	3.0 ^{EB,FB}	nd	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 ^{J,EB,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	nl ⁽¹⁾	nl	nl
	MDL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5	5
	RL		2	2	2	2	2	2	2	2	2.0	2	25	2	25

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 M4

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

EB FD

Q1 Q2 Q3

Estimated concentration, constituent detected at greater than 10% in equipment blank Estimated concentration. Field Duplicate RPD >25%.

not listed nl

nd not detected

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.

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.

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

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

								P	yrethroid Pesticio	des					)
Site	Sample #	Date	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 ¹	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 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, order #R4-2005-0080

na J not analyzed Estimated concentration, results above MDL but below RL

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

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

Y

significantly different from control group no significant diffence between control group 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 not required

N P NR

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

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

Y N

significantly different from control group no significant diffence between control group 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 not required Р

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

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

Y

N P

significantly different from control group no significant diffence between control group partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a succesful TIE (Typically needs a TUc of greater than 2 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	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	Ν		
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%	Ν	Ν		
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%	Ν	Ν		
NGA #64	LAILG-NGA64-3	3/17/12	90.00%	N	100.00%	Ν	Ν		

Y significantly different from control group

N P

no significant diffence between control group partial toxicity. Toxicity high enough to exhibit effects, but not significant enough to initiate a succesful TIE (Typically needs a TUc of greater than 2 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%	Ν	Ν			
NGA #189	LAILG-NGA189-1	1/4/08	100.00%	N	91.67%	Ν	Y			
NGA #19	LAILG-NGA19-3	1/5/08	TI	TIE initiated based in results from sample LAILG-NGA#19-2					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						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						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%	Ν	Ν			
NGA #182	LAILG-NGA182-2	1/23/08	TIE initiated based in results from sample NGA #182-LAILG-1						TIE was initiated, did not show an observed effect	
NGA #19	LAILG-NGA 19-4	8/12/08	90.00%	N	NF	ł	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	NF	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%	Р	98.33%	Ν	Ν			
NGA # 184	LAILG-NGA 184-1	11/26/08	80.00%	Р	100.00%	Ν	Ν			
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%	Ν	Р			
NGA # 130	LAILG-NGA 130-4	11/26/08	N	IR	NR		N			
NGA # 150	LAILG-NGA 150-3	11/26/08	N	IR	NR		Р			
NGA # 25	LAILG-NGA 25-1	11/26/08	80.00%	Y	100.00%	Ν	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	N	IR	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%	Ν	Ν			
NGA # 64	LAILG-NGA 64-2	12/15/08	90.00%	Р	NF	ł	NR			
NGA # 168	LAILG-NGA 168-5	12/15/08	90.00%	Р	NR		NR			
NGA # 4	LAILG-NGA 4-4	12/15/08	0.00%	Y	NF	{	NR	12/16/08	Metals,copper,cadmium,zink,manganese,lead,and nickle	

Y N P

significantly different from control group: no significant diffence between control group 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 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 #130	NGA-#130-LAILG-1	8/6/07	100.00%	Ν	93.33%	Ν	Y		ns
NGA #183	NGA-#183-LAILG-1	8/6/07	100.00%	Ν	93.33%	Ν	Ν		
NGA #19	NGA-#19-LAILG-1	8/13/07	80.00%	Ν	98.30%	N	N		
NGA #124	NGA-#124-LAILG-1	8/13/07	100.00%	Ν	98.30%	N	N		
NGA #168	NGA-#168-LAILG-1	8/13/07	0.00%	Y	98.30%	Ν	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%	Ν	100.00%	N	N		
NGA #182	NGA #182-LAILG-1	12/7/07	0.00%	Y	98.33%	Ν	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%	Ν	98.33%	N	N		
NGA #150	NGA #150-LAILG-2	12/7/07	100.00%	Ν	98.33%	Ν	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%	Ν	100.00%	N	N		
NGA #183	LAILG-NGA#183-3	12/18/07	100.00%	Ν	100.00%	N	N		
NGA #19	LAILG-NGA#19-2	12/18/07	50.00%	Y	100.00%	Ν	Ν		ns
NGA #13	LAILG-NGA#13-1	12/18/07	10.00%	Y	21.67%	Y	Ν		ns
NGA #53	LAILG-NGA#53-1	12/18/07	100.00%	Ν	81.67%	Ν	Ν		

Y

Significantly different from control group No significant diffence between control group not enough runoff for follow up sample

N ns

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

ft/s feet per second mg/L

°C degrees celcius NTU Nephelometric Turbidity Units

microsiemens uS

*

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

#### 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)	рН	E.C. (uS)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
				14:35		nm	13.81	6.18	25.8	10.59	512
NGA #170	LAILG-NGA#170-1	3/25/12	Grab	14:37	nm	nm	13.98	6.32	22.1	10.23	452
				14:40		nm	13.73	6.27	19.8	10.31	446
				15:15		nm	13.17	6.49	39.7	10.69	>800
NGA #176	LAILG-NGA#176-2	3/25/12	Grab	15:17	nm	nm	13.16	6.63	38.4	10.41	>800
				15:21		nm	12.73	6.44	40.2	10.69	>800
				17:45		nm	13.21	7.22	0.129	10.55	5.8
NGA #210	LAILG-NGA#210-2	3/25/12	Grab	17:47	nm	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*width*depth ft/s feet per second milligrams per liter

mg/L NTU

Nephelometric Turbidity Units

°C degrees celcius 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)	pН	E.C. (uS)	Dissolved Oxygen	Turbidity (NTU)
				6:11		nm	12.4	7.92	1114	9.08	815
NGA #19	LAILG-NGA19-7	2/28/14	Bucket	6:12	nm	nm	12.3	7.98	1152	9.52	820
				6:13		nm	12.4	7.87	1112	9.61	810
				9:01		nm	14.8	7.77	1081	7.84	212
NGA #26	LAILG-NGA26-1	2/28/14	Bucket	9:02	nm	nm	14.7	7.82	1057	7.95	225
				9:03		nm	14.7	7.83	1072	7.88	220
				11:22		nm	14.7	7.65	894	9.10	475
NGA #124	LAILG-NGA124-7	2/28/14	Bucket	11:23	nm	nm	14.6	7.50	910	9.01	450
				11:24		nm	14.7	7.51	915	8.80	482
				10:00		nm	15.0	7.88	928	10.15	468
NGA #178	LAILG-NGA178-2	2/28/14	Bucket	10:01	nm	nm	14.9	7.92	952	10.28	472
				10:02		nm	15.0	7.81	943	10.21	490
				7:10		nm	14.7	8.01	1213	8.11	512
NGA #184	LAILG-NGA184-3	2/28/14	Bucket	7:11	nm	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*width*depth.

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

^oC 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)	рН	E.C. (uS)	Dissolved Oxygen	Turbidity (NTU)
				8:00		nm	14.8	9.31	460	9.40	150
NGA #150	LAILG-NGA150-6	12/2/14	Grab	8:15	nm	nm	14.8	9.50	450	9.30	130
				8:20		nm	14.9	8.94	440	10.50	180
				11:20		nm	16.6	7.35	663	9.87	76
NGA #168	LAILG-NGA168-7	5/15/15	Bucket	11:22	nm	nm	16.5	7.44	651	9.47	90
				11:23		nm	16.4	7.5	689	9.72	102
				13:55		nm	13.9	8.83	399	8.00	900
NGA #188	LAILG-NGA188-1	12/2/14	Grab	14:05	nm	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*width*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)	pН	E.C. (uS)	Dissolved Oxygen	Turbidity (NTU)
				8:30		nm	13.2	9.00	85	13.00	58
NGA #64	LAILG-NGA-64-4	1/15/16	Bucket	8:40	nm	nm	13.0	8.80	63	12.62	66
				8:42		nm	12.9	8.27	80	12.37	113
				9:15		nm	12.59	8.12	568	12.93	244
NGA #168	LAILG-NGA168-8	1/15/16	Bucket	9:45	nm	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*width*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



#### e Naturille Seren see Street - Sang- aas

#### **CERTIFICATE OF ANALYSIS**

Client:	Pacific Ridgeline Inc.	Report Date:	01/28/16 11:04
	230 Dove Ct. Santa Paula CA, 93060	Received Date:	01/05/16 12:11
		Turn Around:	Normal
Attention	Bryn Home	Client Project:	Nursery Growers Association
Phone:	(805) 525-5563		
Fax:	(805) 525-2896		
Work Ord	er(s): 6A05038		

#### NELAC #4047-002 ORELAP ELAP#1132 NEVADA #CA211 HAWAII LACSD #10143

The results in this report apply to the samples analyzed in accordance with the Chain of Custody document. Weck Laboratories, Inc. certifies that the test results meet all NELAC requirements unless noted in the case narrative. This analytical report is confidential and is only intended for the use of Weck Laboratories, Inc. and its client. This report contains the Chain of Custody document, which is an integral part of it, and can only be reproduced in full with the authorization of Weck Laboratories, Inc.

Dear Bryn Home :

Enclosed are the results of analyses for samples received 01/05/16 12: 11 with the Chain of Custody document. The samples were received in good condition, at 10.7 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

#### Case Narrative:



Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety

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<u>ansi: 1996 and 1996 and 1996</u>

 Date Received:
 01/05/16 12:11

 Date Reported:
 01/28/16 11:04

Pacific Ridgeline Inc. 230 Dove Ct. Santa Paula CA, 93060

	ANALYTICAL REPORT FOR SAMPLES			
Sample ID	Sampled by:	Lab ID	Matrix	Date Sampled
LAILG-NGA-EB	Scott Jordan	6A05038-01	Water	01/05/16 07:00
LAILG-NGA168-8	Scott Jordan	6A05038-02	Water	01/05/16 09:20
LAILG-NGA64-4	Scott Jordan	6A05038-03	Water	01/05/16 08:30
LAILG-NGA-DUP	Scott Jordan	6A05038-04	Water	01/05/16 09:30
LAILG-NGA-FB	Scott Jordan	6A05038-05	Water	01/05/16 10:30

ANALYSES

Anions by IC, EPA Method 300.0

Chlorinated Pesticides and/or PCBs

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

Metals by EPA 200 Series Methods

Pyrethroid Pesticides by GC/MS SIM

Semivolatile Organic Compounds by GC/MS





Date Received:	01/05/16 12:11
Date Reported:	01/28/16 11:04

Sampled: 01/05/16 07:00	6A05038-01 Sar	LAILG-NGA-EB npled By: Scott Jordan				Matrix: Water
	Anions by I	C, EPA Method 300.0				
Method: EPA 300.0	Batch: W6A0290	Prepared: 01/07/16 1				Analyst: atl
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifie
Chloride, Total	ND	0.50	mg/l	1	01/07/16 16:50	
Sulfate as SO4	ND	0.50	mg/l	1	01/07/16 16:50	
	Chlorinated I	Pesticides and/or PCB	s			
Method: EPA 608	Batch: W6A0222	Prepared: 01/07/16 0	8:26			Analyst: par
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifie
2,4'-DDD	ND	5.0	ng/l	1	01/22/16 01:28	
2,4'-DDE	ND	5.0	ng/l	1	01/22/16 01:28	
2,4'-DDT	ND	5.0	ng/l	1	01/22/16 01:28	
4,4´-DDD	ND	5.0	ng/l	1	01/22/16 01:28	
4,4'-DDE	ND	5.0	ng/l	1	01/22/16 01:28	
4,4´-DDT	ND	5.0	ng/l	1	01/22/16 01:28	
Aldrin	ND	5.0	ng/l	1	01/22/16 01:28	
alpha-BHC	ND	5.0	ng/l	1	01/22/16 01:28	
alpha-Chlordane	ND	5.0	ng/l	1	01/22/16 01:28	
Aroclor 1016	ND	100	ng/l	1	01/22/16 01:28	
Aroclor 1221	ND	100	ng/l	1	01/22/16 01:28	
Aroclor 1232	ND	100	ng/l	1	01/22/16 01:28	
Aroclor 1242	ND	100	ng/l	1	01/22/16 01:28	
Aroclor 1248	ND	100	ng/l	1	01/22/16 01:28	
Aroclor 1254	ND	100	ng/l	1	01/22/16 01:28	
Aroclor 1260	ND	100	ng/l	1	01/22/16 01:28	
beta-BHC	ND	5.0	ng/l	1	01/22/16 01:28	
Chlordane (tech)	ND	100	ng/l	1	01/22/16 01:28	
cis-Nonachlor	ND	5.0	ng/l	1	01/22/16 01:28	
delta-BHC	ND	5.0	ng/l	1	01/22/16 01:28	
Dieldrin	ND	5.0	ng/l	1	01/22/16 01:28	
Endosulfan I	ND	5.0	ng/l	1	01/22/16 01:28	
Endosulfan II	ND	5.0	ng/l	1	01/22/16 01:28	
Endosulfan sulfate	ND	5.0	ng/l	1	01/22/16 01:28	
Endrin	ND	5.0	ng/l	1	01/22/16 01:28	
Endrin aldehyde	ND	5.0	ng/l	1	01/22/16 01:28	
gamma-BHC (Lindane)	ND	5.0	ng/l	1	01/22/16 01:28	
gamma-Chlordane	ND	5.0	ng/l	1	01/22/16 01:28	
Heptachlor	68	5.0	ng/l	1	01/22/16 01:28	
Heptachlor epoxide	ND	5.0	ng/l	1	01/22/16 01:28	
Methoxychlor	ND	5.0	ng/l	1	01/22/16 01:28	
Mirex	ND	5.0	ng/l	1	01/22/16 01:28	
Toxaphene	ND	500	ng/l	1	01/22/16 01:28	
trans-Nonachlor	ND	5.0	ng/l	1	01/22/16 01:28	



<u>หละสิทรรณที่สุดหรือสะสังเกตรี</u> สามารถสามารถสามารถสามารถสามารถสามารถสามารถสามารถสามารถสามารถสามารถสามารถสามารถสามาร

Pacific Ridgeline Inc. 230 Dove Ct. Santa Paula CA, 93060						Date Received: Date Reported:	01/05/16 12:11 01/28/16 11:04
	6A05038	3-01 LAII	_G-NGA-EB				
Sampled: 01/05/16 07:00		Sampled By: S	Scott Jordan				Matrix: Water
	Chlorinat	ed Pesticides	and/or PCB	s			
Method: EPA 608	Batch: W6A0222	Prepare	d: 01/07/16 08	3:26			Analyst: par
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Surr: Decachlorobiphenyl	45 %	Conc:45.3	0.1-118	%			
Surr: Tetrachloro-meta-xylene	71 %	Conc:70.5	12-117	%			
Cor	ventional Chemistry/Phys	sical Paramete	ers by APHA	/EPA/ASTN	/ Metho	ods	
Method: EPA 350.1	Batch: W6A1015	Prepare	d: 01/19/16 18	5:17			Analyst: mbc
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Ammonia as N	ND		0.10	mg/l	1	01/21/16 16:25	
Method: EPA 353.2	Batch: W6A0119	Prepared: 01/05/16 14:07					Analyst: AJW
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
NO2+NO3 as N	ND		100	ug/l	1	01/05/16 16:27	
Method: EPA 365.1	Batch: W6A0215	Prepare	d: 01/06/16 14	4:18			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
o-Phosphate as P	ND		0.0020	mg/l	1	01/06/16 19:10	**
Method: EPA 365.1	Batch: W6A0216	Prepare	d: 01/06/16 14	4:20			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
o-Phosphate as P, dissolved	ND		2.0	ug/l	1	01/06/16 19:44	**
Method: EPA 365.1	Batch: W6A0621	Prepare	d: 01/12/16 18	3:52			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Phosphorus as P, Total	ND		0.010	mg/l	1	01/14/16 15:48	
Method: EPA 365.1	Batch: W6A0812	Prepare	d: 01/15/16 1 [/]	1:27			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Phosphorus, Dissolved	ND		0.010	mg/l	1	01/20/16 15:08	
Method: SM 2540C	Batch: W6A0366	Prepare	d: 01/08/16 1′	1:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Total Dissolved Solids	ND		10	mg/l	1	01/08/16 13:30	
Method: SM 2540D	Batch: W6A0142	Prepare	d: 01/05/16 18	3:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Total Suspended Solids	ND		5	mg/l	1	01/05/16 19:15	
	Metals b	y EPA 200 Seri	ies Methods	5			
Method: EPA 200.7	Batch: [CALC]		d: 01/07/16 12				Analyst: jck
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Calcium Hardness as CaCO3	ND		0.250	mg/l	1	01/12/16 14:57	



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Sampled: 01/05/16 07:00	6A05038-0 Sa	1 LAILG-NGA-E	_			Matrix: Water			
	Metals by E	Metals by EPA 200 Series Methods							
Method: EPA 200.7	Batch: W6A0296	Prepared: 01/07/16 2	12:20			Analyst: jck			
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier			
Calcium, Total	ND	0.100	mg/l	1	01/12/16 14:57				
Method: EPA 200.8	Batch: W6A0301	Prepared: 01/07/16	12:31			Analyst: rrl			
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier			
Copper, Total	ND	0.50	ug/l	1	01/13/16 13:21				

#### Pyrethroid Pesticides by GC/MS SIM

Method: GC/MS NCI-SIM	Batch: W6A0864	Prepare	d: 01/17/16 0	8:10			Analyst: EFC
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Allethrin	ND		2.0	ng/l	1	01/23/16 01:56	
Bifenthrin	ND		2.0	ng/l	1	01/23/16 01:56	
Cyfluthrin	ND		2.0	ng/l	1	01/23/16 01:56	
Cypermethrin	ND		2.0	ng/l	1	01/23/16 01:56	
Deltamethrin/Tralomethrin	ND		2.0	ng/l	1	01/23/16 01:56	
Dichloran	ND		2.0	ng/l	1	01/23/16 01:56	
Fenpropathrin (Danitol)	ND		2.0	ng/l	1	01/23/16 01:56	
Fenvalerate/Esfenvalerate	ND		2.0	ng/l	1	01/23/16 01:56	
L-Cyhalothrin	ND		2.0	ng/l	1	01/23/16 01:56	
Pendimethalin	ND		2.0	ng/l	1	01/23/16 01:56	
Permethrin	ND		5.0	ng/l	1	01/23/16 01:56	
Prallethrin	ND		2.0	ng/l	1	01/23/16 01:56	
Sumithrin (Phenothrin)	ND		10	ng/l	1	01/23/16 01:56	
Tefluthrin	ND		2.0	ng/l	1	01/23/16 01:56	
Surr: Perylene-d12	96 %	Conc:241	2-205	%			
Surr: Triphenyl phosphate	110 %	Conc:275	6-222	%			

#### Semivolatile Organic Compounds by GC/MS

Method: EPA 525.2	Batch: W6A0444	Prepared: 01/10/16 09	9:20			Analyst: EFC
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Azinphos methyl (Guthion)	ND	10	ng/l	1	01/12/16 19:51	
Bolstar	ND	10	ng/l	1	01/12/16 19:51	
Chlorpyrifos	ND	10	ng/l	1	01/12/16 19:51	
Coumaphos	ND	10	ng/l	1	01/12/16 19:51	
Demeton-o	ND	10	ng/l	1	01/12/16 19:51	
Demeton-s	ND	10	ng/l	1	01/12/16 19:51	
Diazinon	ND	10	ng/l	1	01/12/16 19:51	
Dichlorvos	ND	10	ng/l	1	01/12/16 19:51	
Dimethoate	ND	10	ng/l	1	01/12/16 19:51	
Disulfoton	ND	10	ng/l	1	01/12/16 19:51	
Ethoprop	ND	10	ng/l	1	01/12/16 19:51	

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Sampled: 01/05/16 07:00	6A05038	-01 LAI Sampled By: S	<b>LG-NGA-EB</b> Scott Jordan				Matrix: Water
	Semivolatile C	organic Comp	ounds by G	C/MS			
Method: EPA 525.2	Batch: W6A0444		ed: 01/10/16 09				Analyst: EFC
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Ethyl parathion	ND		10	ng/l	1	01/12/16 19:51	
Fensulfothion	ND		10	ng/l	1	01/12/16 19:51	
Fenthion	ND		10	ng/l	1	01/12/16 19:51	
Malathion	ND		10	ng/l	1	01/12/16 19:51	
Merphos	ND		10	ng/l	1	01/12/16 19:51	
Methyl parathion	ND		10	ng/l	1	01/12/16 19:51	
Mevinphos	ND		10	ng/l	1	01/12/16 19:51	
Naled	ND		10	ng/l	1	01/12/16 19:51	
Phorate	ND		10	ng/l	1	01/12/16 19:51	
Ronnel	ND		10	ng/l	1	01/12/16 19:51	
Stirophos	ND		10	ng/l	1	01/12/16 19:51	
Tokuthion (Prothiofos)	ND		10	ng/l	1	01/12/16 19:51	
Trichloronate	ND		10	ng/l	1	01/12/16 19:51	
Surr: 1,3-Dimethyl-2-nitrobenzene	107 %	Conc:536	76-128	%			
Surr: Triphenyl phosphate	95 %	Conc:476	40-163	%			





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Sampled: 01/05/16 09:20	6A05038-02 Sa	LAILG-NGA168- mpled By: Scott Jordan	8			Matrix: Water	
Anions by IC, EPA Method 300.0							
Method: EPA 300.0	Batch: W6A0290	Batch: W6A0290 Prepared: 01/07/16 12:00					
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier	
Chloride, Total	41	1.2	mg/l	2.5	01/07/16 15:41		
Sulfate as SO4	160	1.2	mg/l	2.5	01/07/16 15:41		
	Chlorinated	Pesticides and/or PCE	s				

Method: EPA 608	Batch: W6A0222	ch: W6A0222 Prepared: 01/07/16 08:26				
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
2,4'-DDD	ND	25	ng/l	5	01/22/16 01:58	M-04
2,4'-DDE	ND	25	ng/l	5	01/22/16 01:58	M-04
2,4'-DDT	ND	25	ng/l	5	01/22/16 01:58	M-04
4,4´-DDD	ND	25	ng/l	5	01/22/16 01:58	M-04
4,4´-DDE	ND	25	ng/l	5	01/22/16 01:58	M-04
4,4´-DDT	ND	25	ng/l	5	01/22/16 01:58	M-04
Aldrin	ND	25	ng/l	5	01/22/16 01:58	M-04
alpha-BHC	ND	25	ng/l	5	01/22/16 01:58	M-04
alpha-Chlordane	ND	25	ng/l	5	01/22/16 01:58	M-04
Aroclor 1016	ND	500	ng/l	5	01/22/16 01:58	M-04
Aroclor 1221	ND	500	ng/l	5	01/22/16 01:58	M-04
Aroclor 1232	ND	500	ng/l	5	01/22/16 01:58	M-04
Aroclor 1242	ND	500	ng/l	5	01/22/16 01:58	M-04
Aroclor 1248	ND	500	ng/l	5	01/22/16 01:58	M-04
Aroclor 1254	ND	500	ng/l	5	01/22/16 01:58	M-04
Aroclor 1260	ND	500	ng/l	5	01/22/16 01:58	M-04
beta-BHC	ND	25	ng/l	5	01/22/16 01:58	M-04
Chlordane (tech)	ND	500	ng/l	5	01/22/16 01:58	M-04
cis-Nonachlor	ND	25	ng/l	5	01/22/16 01:58	M-04
delta-BHC	ND	25	ng/l	5	01/22/16 01:58	M-04
Dieldrin	ND	25	ng/l	5	01/22/16 01:58	M-04
Endosulfan I	ND	25	ng/l	5	01/22/16 01:58	M-04
Endosulfan II	ND	25	ng/l	5	01/22/16 01:58	M-04
Endosulfan sulfate	ND	25	ng/l	5	01/22/16 01:58	M-04
Endrin	ND	25	ng/l	5	01/22/16 01:58	M-04
Endrin aldehyde	ND	25	ng/l	5	01/22/16 01:58	M-04
gamma-BHC (Lindane)	ND	25	ng/l	5	01/22/16 01:58	M-04
gamma-Chlordane	ND	25	ng/l	5	01/22/16 01:58	M-04
Heptachlor	ND	25	ng/l	5	01/22/16 01:58	M-04
Heptachlor epoxide	ND	25	ng/l	5	01/22/16 01:58	M-04
Methoxychlor	ND	25	ng/l	5	01/22/16 01:58	M-04
Mirex	ND	25	ng/l	5	01/22/16 01:58	M-04
Toxaphene	ND	2500	ng/l	5	01/22/16 01:58	M-04
trans-Nonachlor	ND	25	ng/l	5	01/22/16 01:58	M-04

<u>จับปรุ่งหลังสุรที่สุรทย์</u> เกาะทั้งหลังสุรทย์กับประ

Pacific Ridgeline Inc. 230 Dove Ct.						Date Received: Date Reported:	01/05/16 12:11 01/28/16 11:04
Santa Paula CA, 93060						Jale Reported.	01/20/10 11.04
	6A05038-	02 LAIL	G-NGA168-	В			
Sampled: 01/05/16 09:20		Sampled By: S	Scott Jordan				Matrix: Water
	Chlorinat	ed Pesticides	and/or PCB	s			
Method: EPA 608	Batch: W6A0222	Prepare	d: 01/07/16 08	8:26			Analyst: par
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Surr: Decachlorobiphenyl	63 %	Conc:62.8	0.1-118	%			M-04
Surr: Tetrachloro-meta-xylene	69 %	Conc:68.8	12-117	%			M-04
Con	ventional Chemistry/Phys	sical Paramete	ers by APHA	/EPA/ASTN	/ Metho	ods	
Method: EPA 350.1	Batch: W6A1015	Prepare	Prepared: 01/19/16 15:17				Analyst: mbc
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Ammonia as N	0.36		0.10	mg/l	1	01/21/16 16:25	
Method: EPA 353.2	Batch: W6A0119	Prepare	d: 01/05/16 14	4:07			Analyst: AJW
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
NO2+NO3 as N	15000		200	ug/l	2	01/05/16 17:52	
Method: EPA 365.1	Batch: W6A0215	Prepare	d: 01/06/16 14	4:18			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
o-Phosphate as P	0.32		0.010	mg/l	5	01/06/16 19:26	**
Method: EPA 365.1	Batch: W6A0216	Prepare	Prepared: 01/06/16 14:20				Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
o-Phosphate as P, dissolved	320		10	ug/l	5	01/06/16 19:43	**
Method: EPA 365.1	Batch: W6A0621	Prepare	d: 01/12/16 18	8:52			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Phosphorus as P, Total	0.80		0.10	mg/l	1	01/14/16 15:49	
Method: EPA 365.1	Batch: W6A0686	Prepare	d: 01/13/16 16	6:07			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Phosphorus, Dissolved	0.45		0.040	mg/l	2	01/20/16 14:20	M-06
Method: SM 2540C	Batch: W6A0366	Prepare	d: 01/08/16 1 [.]	1:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Total Dissolved Solids	410		10	mg/l	1	01/08/16 13:30	
Method: SM 2540D	Batch: W6A0142	Prepare	d: 01/05/16 18	8:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Total Suspended Solids	140		5	mg/l	1	01/05/16 19:15	
	Metals by	y EPA 200 Ser	ies Methods	5			
Method: EPA 200.7	Batch: [CALC]		d: 01/07/16 12				Analyst: jck
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Calcium Hardness as CaCO3	162		0.250	mg/l	1	01/12/16 15:11	

## <u>พระติมะเวลาที่การสร้างกร้</u>างกร้

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 Date Received:
 01/05/16 12:11

 Date Reported:
 01/28/16 11:04

Sampled: 01/05/16 09:20	6A05038-02 Sa	LAILG-NGA168 mpled By: Scott Jordan				Matrix: Water
	Metals by E	PA 200 Series Method	ls			
Method: EPA 200.7	Batch: W6A0296	Prepared: 01/07/16	12:20			Analyst: jck
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Calcium, Total	64.9	0.100	mg/l	1	01/12/16 15:11	
Method: EPA 200.8	Batch: W6A0301	Prepared: 01/07/16	12:31			Analyst: rrl
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Copper, Total	36	0.50	ug/l	1	01/13/16 13:25	

#### Pyrethroid Pesticides by GC/MS SIM

Method: GC/MS NCI-SIM	Batch: W6A0864	Prepare	d: 01/17/16 0	8:10			Analyst: EFC
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Allethrin	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Bifenthrin	310		4.0	ng/l	2	01/23/16 02:28	M-04
Cyfluthrin	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Cypermethrin	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Deltamethrin/Tralomethrin	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Dichloran	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Fenpropathrin (Danitol)	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Fenvalerate/Esfenvalerate	ND		4.0	ng/l	2	01/23/16 02:28	M-04
L-Cyhalothrin	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Pendimethalin	69		4.0	ng/l	2	01/23/16 02:28	M-04
Permethrin	ND		10	ng/l	2	01/23/16 02:28	M-04
Prallethrin	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Sumithrin (Phenothrin)	ND		20	ng/l	2	01/23/16 02:28	M-04
Tefluthrin	ND		4.0	ng/l	2	01/23/16 02:28	M-04
Surr: Perylene-d12	131 %	Conc:327	2-205	%			M-04
Surr: Triphenyl phosphate	156 %	Conc:391	6-222	%			M-04

#### Semivolatile Organic Compounds by GC/MS

Method: EPA 525.2	Batch: W6A0444	Prepared: 01/10/16 09:	20			Analyst: EFC
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Azinphos methyl (Guthion)	ND	10	ng/l	1	01/12/16 20:17	
Bolstar	ND	10	ng/l	1	01/12/16 20:17	
Chlorpyrifos	ND	10	ng/l	1	01/12/16 20:17	
Coumaphos	ND	10	ng/l	1	01/12/16 20:17	
Demeton-o	ND	10	ng/l	1	01/12/16 20:17	
Demeton-s	ND	10	ng/l	1	01/12/16 20:17	
Diazinon	ND	10	ng/l	1	01/12/16 20:17	
Dichlorvos	ND	10	ng/l	1	01/12/16 20:17	
Dimethoate	ND	10	ng/l	1	01/12/16 20:17	
Disulfoton	ND	10	ng/l	1	01/12/16 20:17	
Ethoprop	ND	10	ng/l	1	01/12/16 20:17	

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	6A05038-	02 LAIL	.G-NGA168-	8			
Sampled: 01/05/16 09:20	:	Sampled By:	Scott Jordan				Matrix: Water
	Semivolatile C	Organic Comp	ounds by G	C/MS			
Method: EPA 525.2	Batch: W6A0444	Prepare	ed: 01/10/16 09	9:20			Analyst: EFC
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Ethyl parathion	ND		10	ng/l	1	01/12/16 20:17	
Fensulfothion	ND		10	ng/l	1	01/12/16 20:17	
Fenthion	ND		10	ng/l	1	01/12/16 20:17	
Malathion	ND		10	ng/l	1	01/12/16 20:17	
Merphos	ND		10	ng/l	1	01/12/16 20:17	
Methyl parathion	ND		10	ng/l	1	01/12/16 20:17	
Mevinphos	ND		10	ng/l	1	01/12/16 20:17	
Naled	ND		10	ng/l	1	01/12/16 20:17	
Phorate	ND		10	ng/l	1	01/12/16 20:17	
Ronnel	ND		10	ng/l	1	01/12/16 20:17	
Stirophos	ND		10	ng/l	1	01/12/16 20:17	
Tokuthion (Prothiofos)	ND		10	ng/l	1	01/12/16 20:17	
Trichloronate	ND		10	ng/l	1	01/12/16 20:17	
Surr: 1,3-Dimethyl-2-nitrobenzene	109 %	Conc:544	76-128	%			
Surr: Triphenyl phosphate	121 %	Conc:606	40-163	%			





Date Received:	01/05/16 12:11
Date Reported:	01/28/16 11:04

	6A05038-0	3 LAILG-NGA64-4	4			
Sampled: 01/05/16 08:30	Sa	mpled By: Scott Jordan				Matrix: Water
	Anions by	IC, EPA Method 300.0	)			
Method: EPA 300.0	Batch: W6A0290	Prepared: 01/07/16 1	2:00			Analyst: atl
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Chloride, Total	3.9	0.50	mg/l	1	01/07/16 15:57	
Sulfate as SO4	7.2	0.50	mg/l	1	01/07/16 15:57	
	Chlorinated	Pesticides and/or PCE	Bs			
Method: EPA 608	Batch: W6A0222	Prepared: 01/07/16 0	8:26			Analyst: par
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier

		•				
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
2,4'-DDD	ND	25	ng/l	5	01/22/16 02:29	M-04
2,4'-DDE	ND	25	ng/l	5	01/22/16 02:29	M-04
2,4'-DDT	ND	25	ng/l	5	01/22/16 02:29	M-04
4,4´-DDD	ND	25	ng/l	5	01/22/16 02:29	M-04
4,4´-DDE	ND	25	ng/l	5	01/22/16 02:29	M-04
4,4´-DDT	ND	25	ng/l	5	01/22/16 02:29	M-04
Aldrin	ND	25	ng/l	5	01/22/16 02:29	M-04
alpha-BHC	ND	25	ng/l	5	01/22/16 02:29	M-04
alpha-Chlordane	ND	25	ng/l	5	01/22/16 02:29	<b>M-04</b>
Aroclor 1016	ND	500	ng/l	5	01/22/16 02:29	M-04
Aroclor 1221	ND	500	ng/l	5	01/22/16 02:29	M-04
Aroclor 1232	ND	500	ng/l	5	01/22/16 02:29	<b>M-04</b>
Aroclor 1242	ND	500	ng/l	5	01/22/16 02:29	M-04
Aroclor 1248	ND	500	ng/l	5	01/22/16 02:29	M-04
Aroclor 1254	ND	500	ng/l	5	01/22/16 02:29	M-04
Aroclor 1260	ND	500	ng/l	5	01/22/16 02:29	M-04
beta-BHC	ND	25	ng/l	5	01/22/16 02:29	M-04
Chlordane (tech)	ND	500	ng/l	5	01/22/16 02:29	M-04
cis-Nonachlor	ND	25	ng/l	5	01/22/16 02:29	M-04
delta-BHC	ND	25	ng/l	5	01/22/16 02:29	M-04
Dieldrin	ND	25	ng/l	5	01/22/16 02:29	M-04
Endosulfan I	ND	25	ng/l	5	01/22/16 02:29	M-04
Endosulfan II	ND	25	ng/l	5	01/22/16 02:29	M-04
Endosulfan sulfate	ND	25	ng/l	5	01/22/16 02:29	M-04
Endrin	ND	25	ng/l	5	01/22/16 02:29	M-04
Endrin aldehyde	ND	25	ng/l	5	01/22/16 02:29	M-04
gamma-BHC (Lindane)	ND	25	ng/l	5	01/22/16 02:29	M-04
gamma-Chlordane	ND	25	ng/l	5	01/22/16 02:29	M-04
Heptachlor	ND	25	ng/l	5	01/22/16 02:29	M-04
Heptachlor epoxide	ND	25	ng/l	5	01/22/16 02:29	M-04
Methoxychlor	ND	25	ng/l	5	01/22/16 02:29	M-04
Mirex	ND	25	ng/l	5	01/22/16 02:29	M-04
Toxaphene	ND	2500	ng/l	5	01/22/16 02:29	M-04
trans-Nonachlor	ND	25	ng/l	5	01/22/16 02:29	M-04

พระสัญหารักษรที่ได้เรา New York I start and your a

Pacific Ridgeline Inc. 230 Dove Ct.						Date Received: Date Reported:	01/05/16 12:11 01/28/16 11:04
Santa Paula CA, 93060						Jate Reported.	01/20/10 11:0-
	6A05038	-03 LAIL	.G-NGA64-4				
Sampled: 01/05/16 08:30		Sampled By: S	Scott Jordan				Matrix: Water
	Chlorinat	ed Pesticides	and/or PCB	s			
Method: EPA 608	Batch: W6A0222	Prepared	d: 01/07/16 08	8:26			Analyst: par
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
Surr: Decachlorobiphenyl	44 %	Conc:44.3	0.1-118	%			M-04
Surr: Tetrachloro-meta-xylene	77 %	Conc:76.8	12-117	%			M-04
Con	ventional Chemistry/Phys	sical Paramete	rs by APHA	/EPA/ASTN	/ Metho	ods	
Method: EPA 350.1	Batch: W6A1015	Prepared: 01/19/16 15:17					Analyst: mbc
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
Ammonia as N	0.63		0.10	mg/l	1	01/21/16 16:25	
Method: EPA 353.2	Batch: W6A0119	Prepared	d: 01/05/16 14	4:07			Analyst: AJW
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
NO2+NO3 as N	700		100	ug/l	1	01/05/16 17:06	
Method: EPA 365.1	Batch: W6A0215	Prepared	d: 01/06/16 14	4:18			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
o-Phosphate as P	0.16		0.0020	mg/l	1	01/06/16 19:13	*1
Method: EPA 365.1	Batch: W6A0216	Prepared: 01/06/16 14:20					Analyst: lac
Analyte	Result		MRL Units		Dil	Analyzed	Qualifie
o-Phosphate as P, dissolved	150		2.0	ug/l	1	01/06/16 19:46	*:
Method: EPA 365.1	Batch: W6A0621	Prepared	d: 01/12/16 18	8:52			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
Phosphorus as P, Total	0.46		0.050	mg/l	1	01/14/16 15:50	
Method: EPA 365.1	Batch: W6A0686	Prepared	d: 01/13/16 16	6:07			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
Phosphorus, Dissolved	0.17		0.010	mg/l	1	01/20/16 14:22	
Method: SM 2540C	Batch: W6A0366	Prepareo	d: 01/08/16 1 [.]	1:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
Total Dissolved Solids	45		10	mg/l	1	01/08/16 13:30	
Method: SM 2540D	Batch: W6A0142	Prepared	d: 01/05/16 18	8:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
Total Suspended Solids	190		5	mg/l	1	01/05/16 19:15	
	Metals by	y EPA 200 Seri	es Methods	5			
Method: EPA 200.7	Batch: [CALC]		d: 01/07/16 12				Analyst: jck
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifie
Calcium Hardness as CaCO3	28.3		0.250	mg/l	1	01/12/16 15:13	



Date Received:01/05/16 12:11Date Reported:01/28/16 11:04

Sampled: 01/05/16 08:30	6A05038-0 Sa		Matrix: Water			
	Metals by E	EPA 200 Series Method	s			
Method: EPA 200.7	Batch: W6A0296	Prepared: 01/07/16 1	2:20			Analyst: jck
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Calcium, Total	11.3	0.100	mg/l	1	01/12/16 15:13	
Method: EPA 200.8	Batch: W6A0301	Prepared: 01/07/16 1	2:31			Analyst: rrl
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Copper, Total	27	0.50	ug/l	1	01/13/16 13:29	

#### Pyrethroid Pesticides by GC/MS SIM

Method: GC/MS NCI-SIM	Batch: W6A0864	Prepare	d: 01/17/16 0	8:10		Analyst: EFC	
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Allethrin	ND		2.0	ng/l	1	01/23/16 03:01	
Bifenthrin	2.0		2.0	ng/l	1	01/23/16 03:01	
Cyfluthrin	ND		2.0	ng/l	1	01/23/16 03:01	
Cypermethrin	ND		2.0	ng/l	1	01/23/16 03:01	
Deltamethrin/Tralomethrin	ND		2.0	ng/l	1	01/23/16 03:01	
Dichloran	2.6		2.0	ng/l	1	01/23/16 03:01	
Fenpropathrin (Danitol)	ND		2.0	ng/l	1	01/23/16 03:01	
Fenvalerate/Esfenvalerate	ND		2.0	ng/l	1	01/23/16 03:01	
L-Cyhalothrin	ND		2.0	ng/l	1	01/23/16 03:01	
Pendimethalin	2.7		2.0	ng/l	1	01/23/16 03:01	
Permethrin	ND		5.0	ng/l	1	01/23/16 03:01	
Prallethrin	ND		2.0	ng/l	1	01/23/16 03:01	
Sumithrin (Phenothrin)	ND		10	ng/l	1	01/23/16 03:01	
Tefluthrin	ND		2.0	ng/l	1	01/23/16 03:01	
Surr: Perylene-d12	105 %	Conc:263	2-205	%			
Surr: Triphenyl phosphate	139 %	Conc:347	6-222	%			

#### Semivolatile Organic Compounds by GC/MS

Method: EPA 525.2	Batch: W6A0444	Prepared: 01/10/16 09:20				Analyst: EFC	
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier	
Azinphos methyl (Guthion)	ND	10	ng/l	1	01/12/16 20:42		
Bolstar	ND	10	ng/l	1	01/12/16 20:42		
Chlorpyrifos	ND	10	ng/l	1	01/12/16 20:42		
Coumaphos	ND	10	ng/l	1	01/12/16 20:42		
Demeton-o	ND	10	ng/l	1	01/12/16 20:42		
Demeton-s	ND	10	ng/l	1	01/12/16 20:42		
Diazinon	ND	10	ng/l	1	01/12/16 20:42		
Dichlorvos	ND	10	ng/l	1	01/12/16 20:42		
Dimethoate	ND	10	ng/l	1	01/12/16 20:42		
Disulfoton	ND	10	ng/l	1	01/12/16 20:42		
Ethoprop	ND	10	ng/l	1	01/12/16 20:42		

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Date Received:01/05/16 12:11Date Reported:01/28/16 11:04

	6A05038		LG-NGA64-4	Ļ			
Sampled: 01/05/16 08:30		Sampled By:	Scott Jordan				Matrix: Water
	Semivolatile C	Organic Comp	ounds by G	C/MS			
Method: EPA 525.2	Batch: W6A0444	Prepare	ed: 01/10/16 09	9:20			Analyst: EFC
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Ethyl parathion	ND		10	ng/l	1	01/12/16 20:42	
Fensulfothion	ND		10	ng/l	1	01/12/16 20:42	
Fenthion	ND		10	ng/l	1	01/12/16 20:42	
Malathion	ND		10	ng/l	1	01/12/16 20:42	
Merphos	ND		10	ng/l	1	01/12/16 20:42	
Methyl parathion	ND		10	ng/l	1	01/12/16 20:42	
Mevinphos	ND		10	ng/l	1	01/12/16 20:42	
Naled	ND		10	ng/l	1	01/12/16 20:42	
Phorate	ND		10	ng/l	1	01/12/16 20:42	
Ronnel	ND		10	ng/l	1	01/12/16 20:42	
Stirophos	ND		10	ng/l	1	01/12/16 20:42	
Tokuthion (Prothiofos)	ND		10	ng/l	1	01/12/16 20:42	
Trichloronate	ND		10	ng/l	1	01/12/16 20:42	
Surr: 1,3-Dimethyl-2-nitrobenzene	132 %	Conc:662	76-128	%			S-GC
Surr: Triphenyl phosphate	138 %	Conc:688	40-163	%			

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Toxaphene

trans-Nonachlor



Date Received:	01/05/16 12:11
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Sampled: 01/05/16 09:30	6A05038-04 Sai	LAILG-NGA-DUI mpled By: Scott Jordan	P			Matrix: Water
	Anions by	IC, EPA Method 300.0				
Method: EPA 300.0	Batch: W6A0290		Prepared: 01/07/16 12:00			Analyst: atl
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Chloride, Total	39	2.5	mg/l	5	01/07/16 17:21	
Sulfate as SO4	160	2.5	mg/l	5	01/07/16 17:21	
	Chlorinated	Pesticides and/or PCB	S			
Method: EPA 608	Batch: W6A0222	Batch: W6A0222 Prepared: 01/07/16 08:26				Analyst: par
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
2,4'-DDD	ND	25	ng/l	5	01/22/16 02:59	M-04
2,4'-DDE	ND	25	ng/l	5	01/22/16 02:59	M-04
2,4'-DDT	ND	25	ng/l	5	01/22/16 02:59	M-04
4,4´-DDD	ND	25	ng/l	5	01/22/16 02:59	M-04
4,4'-DDE	ND	25	ng/l	5	01/22/16 02:59	M-04
4,4´-DDT	ND	25	ng/l	5	01/22/16 02:59	M-04
Aldrin	ND	25	ng/l	5	01/22/16 02:59	M-04
alpha-BHC	ND	25	ng/l	5	01/22/16 02:59	M-04
alpha-Chlordane	ND	25	ng/l	5	01/22/16 02:59	M-04
Aroclor 1016	ND	500	ng/l	5	01/22/16 02:59	M-04
Aroclor 1221	ND	500	ng/l	5	01/22/16 02:59	M-04
Aroclor 1232	ND	500	ng/l	5	01/22/16 02:59	M-04
Aroclor 1242	ND	500	ng/l	5	01/22/16 02:59	M-04
Aroclor 1248	ND	500	ng/l	5	01/22/16 02:59	M-04
Aroclor 1254	ND	500	ng/l	5	01/22/16 02:59	M-04
Aroclor 1260	ND	500	ng/l	5	01/22/16 02:59	M-04
beta-BHC	ND	25	ng/l	5	01/22/16 02:59	M-04
Chlordane (tech)	ND	500	ng/l	5	01/22/16 02:59	M-04
cis-Nonachlor	ND	25	ng/l	5	01/22/16 02:59	M-04
delta-BHC	ND	25	ng/l	5	01/22/16 02:59	M-04
Dieldrin	ND	25	ng/l	5	01/22/16 02:59	M-04
Endosulfan I	ND	25	ng/l	5	01/22/16 02:59	M-04
Endosulfan II	ND	25	ng/l	5	01/22/16 02:59	M-04
Endosulfan sulfate	ND	25	ng/l	5	01/22/16 02:59	M-04
Endrin	ND	25	ng/l	5	01/22/16 02:59	M-04
Endrin aldehyde	ND	25	ng/l	5	01/22/16 02:59	M-04
gamma-BHC (Lindane)	ND	25	ng/l	5	01/22/16 02:59	M-04
gamma-Chlordane	ND	25	ng/l	5	01/22/16 02:59	M-04
Heptachlor	ND	25	ng/l	5	01/22/16 02:59	M-04
' Heptachlor epoxide	ND	25	ng/l	5	01/22/16 02:59	M-04
Methoxychlor	ND	25	ng/l	5	01/22/16 02:59	M-04
Mirex	ND	25	ng/l	5	01/22/16 02:59	M-04

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634 The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety

ND

ND

2500

25

ng/l

ng/l

5

5

01/22/16 02:59

01/22/16 02:59

M-04

M-04

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หารอีกแรงที่มีการจั๊กแรง่งหาริ สามาร์

Pacific Ridgeline Inc. 230 Dove Ct. Santa Paula CA, 93060					-	Date Received: Date Reported:	01/05/16 12:11 01/28/16 11:04
Santa Faula CA, 95000							
	6A05038-		G-NGA-DUF	5			
Sampled: 01/05/16 09:30		Sampled By: S	cott Jordan				Matrix: Water
	Chlorinat	ed Pesticides	and/or PCB	s			
Method: EPA 608	Batch: W6A0222	Prepared	1: 01/07/16 08	3:26			Analyst: par
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Surr: Decachlorobiphenyl	69 %	Conc:69.2	0.1-118	%			M-04
Surr: Tetrachloro-meta-xylene	74 %	Conc:74.2	12-117	%			M-04
Cor	ventional Chemistry/Phys	sical Paramete	rs by APHA	/EPA/ASTN	/ Metho	ods	
Method: EPA 350.1	Batch: W6A1015	Prepared: 01/19/16 15:17					Analyst: mbc
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Ammonia as N	0.36		0.10	mg/l	1	01/21/16 16:25	
Method: EPA 353.2	Batch: W6A0119	Prepared	1: 01/05/16 14	4:07			Analyst: AJW
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
NO2+NO3 as N	15000		200	ug/l	2	01/05/16 17:54	
Method: EPA 365.1	Batch: W6A0215	Prepared: 01/06/16 14:18					Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
o-Phosphate as P	0.35		0.010	mg/l	5	01/06/16 19:27	**
Method: EPA 365.1	Batch: W6A0216	Prepared: 01/06/16 14:20					Analyst: lac
Analyte	Result		MRL Units		Dil	Analyzed	Qualifier
o-Phosphate as P, dissolved	350		10	ug/l	5	01/06/16 19:47	**
Method: EPA 365.1	Batch: W6A0621	Prepareo	d: 01/12/16 18	3:52			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Phosphorus as P, Total	0.91		0.10	mg/l	1	01/14/16 15:52	
Method: EPA 365.1	Batch: W6A0686	Prepared	d: 01/13/16 10	6:07			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Phosphorus, Dissolved	0.50		0.040	mg/l	2	01/20/16 14:23	M-06
Method: SM 2540C	Batch: W6A0366	Prepare	d: 01/08/16 1 [.]	1:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Total Dissolved Solids	410		10	mg/l	1	01/08/16 13:30	
Method: SM 2540D	Batch: W6A0142	Prepareo	1: 01/05/16 18	3:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Total Suspended Solids	160		5	mg/l	1	01/05/16 19:15	
	Metals by	y EPA 200 Seri	es Methods	;			
Method: EPA 200.7	Batch: [CALC]		1: 01/07/16 12				Analyst: jck
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Calcium Hardness as CaCO3	159		0.250	mg/l	1	01/12/16 15:16	



 Date Received:
 01/05/16 12:11

 Date Reported:
 01/28/16 11:04

Sampled: 01/05/16 09:30	6A05038-04 Sa	4 LAILG-NGA-DU ampled By: Scott Jordan				Matrix: Water
	Metals by F	EPA 200 Series Method	s			
Method: EPA 200.7	Batch: W6A0296	Prepared: 01/07/16 1	2:20			Analyst: jck
Analyte	Result	MRL Units Dil Analyzed				Qualifier
Calcium, Total	63.6	0.100	mg/l	1	01/12/16 15:16	
Method: EPA 200.8	Batch: W6A0301	Prepared: 01/07/16 1	2:31			Analyst: rrl
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Copper, Total	41	0.50	ug/l	1	01/13/16 13:34	

#### Pyrethroid Pesticides by GC/MS SIM

Method: GC/MS NCI-SIM	Batch: W6A0864	Prepare	d: 01/17/16 0	8:10			Analyst: EFC
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Allethrin	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Bifenthrin	250		4.0	ng/l	2	01/23/16 03:33	M-04
Cyfluthrin	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Cypermethrin	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Deltamethrin/Tralomethrin	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Dichloran	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Fenpropathrin (Danitol)	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Fenvalerate/Esfenvalerate	ND		4.0	ng/l	2	01/23/16 03:33	M-04
L-Cyhalothrin	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Pendimethalin	50		4.0	ng/l	2	01/23/16 03:33	M-04
Permethrin	ND		10	ng/l	2	01/23/16 03:33	M-04
Prallethrin	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Sumithrin (Phenothrin)	ND		20	ng/l	2	01/23/16 03:33	M-04
Tefluthrin	ND		4.0	ng/l	2	01/23/16 03:33	M-04
Surr: Perylene-d12	105 %	Conc:263	2-205	%			M-04
Surr: Triphenyl phosphate	125 %	Conc:314	6-222	%			M-04

#### Semivolatile Organic Compounds by GC/MS

Method: EPA 525.2	Batch: W6A0444	Prepared: 01/10/16 09:20				Analyst: EFC
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Azinphos methyl (Guthion)	ND	10	ng/l	1	01/12/16 21:08	
Bolstar	ND	10	ng/l	1	01/12/16 21:08	
Chlorpyrifos	ND	10	ng/l	1	01/12/16 21:08	
Coumaphos	ND	10	ng/l	1	01/12/16 21:08	
Demeton-o	ND	10	ng/l	1	01/12/16 21:08	
Demeton-s	ND	10	ng/l	1	01/12/16 21:08	
Diazinon	ND	10	ng/l	1	01/12/16 21:08	
Dichlorvos	ND	10	ng/l	1	01/12/16 21:08	
Dimethoate	ND	10	ng/l	1	01/12/16 21:08	
Disulfoton	ND	10	ng/l	1	01/12/16 21:08	
Ethoprop	ND	10	ng/l	1	01/12/16 21:08	

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Date Received:01/05/16 12:11Date Reported:01/28/16 11:04

	6A05038-		.G-NGA-DUF	,			
Sampled: 01/05/16 09:30	:	Sampled By: S	Scott Jordan				Matrix: Water
	Semivolatile C	rganic Comp	ounds by G	C/MS			
Method: EPA 525.2	Batch: W6A0444	Prepare	d: 01/10/16 09	9:20			Analyst: EFC
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Ethyl parathion	ND		10	ng/l	1	01/12/16 21:08	
Fensulfothion	ND		10	ng/l	1	01/12/16 21:08	
Fenthion	ND		10	ng/l	1	01/12/16 21:08	
Malathion	ND		10	ng/l	1	01/12/16 21:08	
Merphos	ND		10	ng/l	1	01/12/16 21:08	
Methyl parathion	ND		10	ng/l	1	01/12/16 21:08	
Mevinphos	ND		10	ng/l	1	01/12/16 21:08	
Naled	ND		10	ng/l	1	01/12/16 21:08	
Phorate	ND		10	ng/l	1	01/12/16 21:08	
Ronnel	ND		10	ng/l	1	01/12/16 21:08	
Stirophos	ND		10	ng/l	1	01/12/16 21:08	
Tokuthion (Prothiofos)	ND		10	ng/l	1	01/12/16 21:08	
Trichloronate	ND		10	ng/l	1	01/12/16 21:08	
Surr: 1,3-Dimethyl-2-nitrobenzene	110 %	Conc:550	76-128	%			
Surr: Triphenyl phosphate	121 %	Conc:607	40-163	%			



Heptachlor epoxide

Methoxychlor

Toxaphene

trans-Nonachlor

Mirex



Date Received:	01/05/16 12:11
Date Reported:	01/28/16 11:04

Santa Paula CA, 93060						
	6A05038-05	LAILG-NGA-FB				
Sampled: 01/05/16 10:30	San	pled By: Scott Jordan				Matrix: Water
	Anions by l	C, EPA Method 300.0				
Method: EPA 300.0	Batch: W6A0290	Prepared: 01/07/16 1	2:00			Analyst: atl
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifie
Chloride, Total	ND	0.50	mg/l	1	01/07/16 17:05	
Sulfate as SO4	ND	0.50	mg/l	1	01/07/16 17:05	
	Chlorinated F	Pesticides and/or PCB	S			
Method: EPA 608	Batch: W6A0222	Prepared: 01/07/16 0	8:26			Analyst: par
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifie
2,4'-DDD	ND	5.0	ng/l	1	01/22/16 03:30	
2,4'-DDE	ND	5.0	ng/l	1	01/22/16 03:30	
2,4'-DDT	ND	5.0	ng/l	1	01/22/16 03:30	
4,4´-DDD	ND	5.0	ng/l	1	01/22/16 03:30	
4,4´-DDE	ND	5.0	ng/l	1	01/22/16 03:30	
4,4´-DDT	ND	5.0	ng/l	1	01/22/16 03:30	
Aldrin	ND	5.0	ng/l	1	01/22/16 03:30	
alpha-BHC	ND	5.0	ng/l	1	01/22/16 03:30	
alpha-Chlordane	ND	5.0	ng/l	1	01/22/16 03:30	
Aroclor 1016	ND	100	ng/l	1	01/22/16 03:30	
Aroclor 1221	ND	100	ng/l	1	01/22/16 03:30	
Aroclor 1232	ND	100	ng/l	1	01/22/16 03:30	
Aroclor 1242	ND	100	ng/l	1	01/22/16 03:30	
Aroclor 1248	ND	100	ng/l	1	01/22/16 03:30	
Aroclor 1254	ND	100	ng/l	1	01/22/16 03:30	
Aroclor 1260	ND	100	ng/l	1	01/22/16 03:30	
beta-BHC	ND	5.0	ng/l	1	01/22/16 03:30	
Chlordane (tech)	ND	100	ng/l	1	01/22/16 03:30	
cis-Nonachlor	ND	5.0	ng/l	1	01/22/16 03:30	
delta-BHC	ND	5.0	ng/l	1	01/22/16 03:30	
Dieldrin	ND	5.0	ng/l	1	01/22/16 03:30	
Endosulfan I	ND	5.0	ng/l	1	01/22/16 03:30	
Endosulfan II	ND	5.0	ng/l	1	01/22/16 03:30	
Endosulfan sulfate	ND	5.0	ng/l	1	01/22/16 03:30	
Endrin	ND	5.0	ng/l	1	01/22/16 03:30	
Endrin aldehyde	ND	5.0	ng/l	1	01/22/16 03:30	
gamma-BHC (Lindane)	ND	5.0	ng/l	1	01/22/16 03:30	
gamma-Chlordane	ND	5.0	ng/l	1	01/22/16 03:30	
Heptachlor	ND	5.0	ng/l	1	01/22/16 03:30	
· · · · · · · · · · · · · · · · · · ·						

5.0

5.0

5.0

500

5.0

ng/l

ng/l

ng/l

ng/l

ng/l

01/22/16 03:30

01/22/16 03:30

01/22/16 03:30

01/22/16 03:30

01/22/16 03:30

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1

1

1

1

1

ND

ND

ND

ND

ND



<u>ອັດເຊັ່ງແມ່ນເປັນເປັນເຊັ່ງແມ່ນ</u> ອັດເຊັ່ງແມ່ນ

Pacific Ridgeline Inc. 230 Dove Ct. Santa Paula CA, 93060						Date Received: Date Reported:	01/05/16 12:11 01/28/16 11:04
	6A05038	3-05 LAI	LG-NGA-FB				
Sampled: 01/05/16 10:30		Sampled By: S	Scott Jordan				Matrix: Water
	Chlorinat	ed Pesticides	and/or PCB	s			
Method: EPA 608	Batch: W6A0222	Prepare	d: 01/07/16 08	8:26			Analyst: par
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Surr: Decachlorobiphenyl	86 %	Conc:86.3	0.1-118	%			
Surr: Tetrachloro-meta-xylene	83 %	Conc:83.1	12-117	%			
Con	ventional Chemistry/Phys	sical Paramete	ers by APHA	VEPA/AST	/ Metho	ods	
Method: EPA 350.1	Batch: W6A1015	Prepare	d: 01/19/16 1	5:17			Analyst: mbc
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Ammonia as N	ND		0.10	mg/l	1	01/21/16 16:25	
Method: EPA 353.2	Batch: W6A0119	Prepare	d: 01/05/16 14	4:07			Analyst: AJW
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
NO2+NO3 as N	ND		100	ug/l	1	01/05/16 16:34	
Method: EPA 365.1	Batch: W6A0215	Prepare	d: 01/06/16 14	4.18			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
o-Phosphate as P	ND		0.0020	mg/l	1	01/06/16 19:15	**
Method: EPA 365.1	Batch: W6A0216	Prepare	d: 01/06/16 14	4:20			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
o-Phosphate as P, dissolved	ND		2.0	ug/l	1	01/06/16 19:40	**
Method: EPA 365.1	Batch: W6A0621	Prepare	d: 01/12/16 18	8:52			Analyst: lac
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Phosphorus as P, Total	ND		0.010	mg/l	1	01/14/16 15:37	
Method: EPA 365.1	Batch: W6A0686	Prepare	d: 01/13/16 16	6:07			Analyst: lac
Analyte	Result	·	MRL	Units	Dil	Analyzed	Qualifier
Phosphorus, Dissolved	ND		0.010	mg/l	1	01/20/16 14:09	
Method: SM 2540C	Batch: W6A0366	Prepare	d: 01/08/16 1 [.]	1:19			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Total Dissolved Solids	ND		10	mg/l	1	01/08/16 13:30	
Method: SM 2540D	Batch: W6A0148	Prepare	d: 01/05/16 19	9:30			Analyst: ajw
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Total Suspended Solids	ND		5	mg/l	1	01/05/16 21:10	2
	Metals by	y EPA 200 Ser	ies Methods	5			
Method: EPA 200.7	Batch: [CALC]	-	d: 01/07/16 12				Analyst: jck
Analyte	Result	,	MRL	Units	Dil	Analyzed	Qualifier
Calcium Hardness as CaCO3	ND		0.250	mg/l	1	01/12/16 15:19	



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Sampled: 01/05/16 10:30	6A05038-0 Sa	5 LAILG-NGA-F mpled By: Scott Jordan				Matrix: Water				
	Metals by E	EPA 200 Series Method	ls							
Method: EPA 200.7	Batch: W6A0296	Batch: W6A0296 Prepared: 01/07/16 12:20								
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier				
Calcium, Total	ND	0.100	mg/l	1	01/12/16 15:19					
Method: EPA 200.8	Batch: W6A0301	Prepared: 01/07/16	12:31			Analyst: rrl				
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier				
Copper, Total	ND	0.50	ug/l	1	01/13/16 13:42					

#### Pyrethroid Pesticides by GC/MS SIM

Method: GC/MS NCI-SIM	Batch: W6A0864	Prepare	d: 01/17/16 0	8:10			Analyst: EFC
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier
Allethrin	ND		2.0	ng/l	1	01/23/16 04:06	
Bifenthrin	ND		2.0	ng/l	1	01/23/16 04:06	
Cyfluthrin	ND		2.0	ng/l	1	01/23/16 04:06	
Cypermethrin	ND		2.0	ng/l	1	01/23/16 04:06	
Deltamethrin/Tralomethrin	ND		2.0	ng/l	1	01/23/16 04:06	
Dichloran	ND		2.0	ng/l	1	01/23/16 04:06	
Fenpropathrin (Danitol)	ND		2.0	ng/l	1	01/23/16 04:06	
Fenvalerate/Esfenvalerate	ND		2.0	ng/l	1	01/23/16 04:06	
L-Cyhalothrin	ND		2.0	ng/l	1	01/23/16 04:06	
Pendimethalin	ND		2.0	ng/l	1	01/23/16 04:06	
Permethrin	ND		5.0	ng/l	1	01/23/16 04:06	
Prallethrin	ND		2.0	ng/l	1	01/23/16 04:06	
Sumithrin (Phenothrin)	ND		10	ng/l	1	01/23/16 04:06	
Tefluthrin	ND		2.0	ng/l	1	01/23/16 04:06	
Surr: Perylene-d12	206 %	Conc:515	2-205	%			S-GC
Surr: Triphenyl phosphate	122 %	Conc:306	6-222	%			

#### Semivolatile Organic Compounds by GC/MS

Method: EPA 525.2	Batch: W6A0444	Prepared: 01/10/16 09	9:20			Analyst: EFC
Analyte	Result	MRL	Units	Dil	Analyzed	Qualifier
Azinphos methyl (Guthion)	ND	10	ng/l	1	01/12/16 21:34	
Bolstar	ND	10	ng/l	1	01/12/16 21:34	
Chlorpyrifos	ND	10	ng/l	1	01/12/16 21:34	
Coumaphos	ND	10	ng/l	1	01/12/16 21:34	
Demeton-o	ND	10	ng/l	1	01/12/16 21:34	
Demeton-s	ND	10	ng/l	1	01/12/16 21:34	
Diazinon	ND	10	ng/l	1	01/12/16 21:34	
Dichlorvos	ND	10	ng/l	1	01/12/16 21:34	
Dimethoate	ND	10	ng/l	1	01/12/16 21:34	
Disulfoton	ND	10	ng/l	1	01/12/16 21:34	
Ethoprop	ND	10	ng/l	1	01/12/16 21:34	

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Sampled: 01/05/16 10:30	6A05038	-05 LAI Sampled By:	LG-NGA-FB				Matrix: Water		
	Semivolatile C	Organic Comp	ounds by G	C/MS					
Method: EPA 525.2	Batch: W6A0444	Prepare	ed: 01/10/16 09	9:20			Analyst: EFC		
Analyte	Result		MRL	Units	Dil	Analyzed	Qualifier		
Ethyl parathion	ND		10	ng/l	1	01/12/16 21:34			
Fensulfothion	ND		10	ng/l	1	01/12/16 21:34			
Fenthion	ND		10	ng/l	1	01/12/16 21:34			
Malathion	ND		10	ng/l	1	01/12/16 21:34			
Merphos	ND		10	ng/l	1	01/12/16 21:34			
Methyl parathion	ND		10	ng/l	1	01/12/16 21:34			
Mevinphos	ND		10	ng/l	1	01/12/16 21:34			
Naled	ND		10	ng/l	1	01/12/16 21:34			
Phorate	ND		10	ng/l	1	01/12/16 21:34			
Ronnel	ND		10	ng/l	1	01/12/16 21:34			
Stirophos	ND		10	ng/l	1	01/12/16 21:34			
Tokuthion (Prothiofos)	ND		10	ng/l	1	01/12/16 21:34			
Trichloronate	ND		10	ng/l	1	01/12/16 21:34			
Surr: 1,3-Dimethyl-2-nitrobenzene	112 %	Conc:562	76-128	%					
Surr: Triphenyl phosphate	106 %	Conc:531	40-163	%					





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# QUALITY CONTROL SECTION

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#### Anions by IC, EPA Method 300.0 - Quality Control

#### Batch W6A0290 - EPA 300.0

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0290-BLK1)				Analyzed: (	01/07/16 12	:35				
Chloride, Total	ND	0.50	mg/l							
Sulfate as SO4	ND	0.50	mg/l							
LCS (W6A0290-BS1)				Analyzed: (	01/07/16 12	:53				
Chloride, Total	3.67	0.50	mg/l	4.00		92	90-110			
Sulfate as SO4	8.38	0.50	mg/l	8.00		105	90-110			
Matrix Spike (W6A0290-MS1)	Source	: 6A06054-05		Analyzed: (	01/07/16 13	:58				
Chloride, Total	38.6	5.0	mg/l	40.0	2.67	90	76-118			
Sulfate as SO4	107	5.0	mg/l	80.0	21.3	107	78-111			
Matrix Spike (W6A0290-MS2)	Source	: 6A06054-08		Analyzed: (	01/07/16 15	:09				
Chloride, Total	43.4	5.0	mg/l	40.0	5.82	94	76-118			
Sulfate as SO4	90.7	5.0	mg/l	80.0	11.3	99	78-111			
Matrix Spike Dup (W6A0290-MSD1)	Source	: 6A06054-05		Analyzed: (	01/07/16 14	:36				
Chloride, Total	38.0	5.0	mg/l	40.0	2.67	88	76-118	1	20	
Sulfate as SO4	102	5.0	mg/l	80.0	21.3	101	78-111	5	20	
Matrix Spike Dup (W6A0290-MSD2)	Source	: 6A06054-08		Analyzed: (	01/07/16 15	:25				
Chloride, Total	42.4	5.0	mg/l	40.0	5.82	92	76-118	2	20	
Sulfate as SO4	97.0	5.0	mg/l	80.0	11.3	107	78-111	7	20	

**Chlorinated Pesticides and/or PCBs - Quality Control** 

#### Batch W6A0222 - EPA 608

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0222-BLK1)				Analyzed: (	01/21/16 21	:22				
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							





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#### Chlorinated Pesticides and/or PCBs - Quality Control

#### Batch W6A0222 - EPA 608

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0222-BLK1)				Analyzed:	01/21/16 21:	22				
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							
Surr: Decachlorobiphenyl	90.5		ng/l	100		91	0.1-118			
Surr: Tetrachloro-meta-xylene	76.4		ng/l	100		76	12-117			
Blank (W6A0222-BLK2)				Analyzed:	01/21/16 21:	53				
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							





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#### Chlorinated Pesticides and/or PCBs - Quality Control

#### Batch W6A0222 - EPA 608

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0222-BLK2)				Analyzed:	01/21/16 21:5	53				
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							
Surr: Decachlorobiphenyl	98.0		ng/l	100		98	0.1-118			
Surr: Tetrachloro-meta-xylene	80.6		ng/l	100		81	12-117			
LCS (W6A0222-BS1)				Analyzed:	01/21/16 22:2	24				
4,4´-DDD	91.3	5.0	ng/l	100		91	42-133			
4,4´-DDE	89.3	5.0	ng/l	100		89	33-126			
4,4´-DDT	97.8	5.0	ng/l	100		98	35-147			
Aldrin	85.9	5.0	ng/l	100		86	18-117			
alpha-BHC	88.8	5.0	ng/l	100		89	47-119			
beta-BHC	95.5	5.0	ng/l	100		95	53-123			
delta-BHC	103	5.0	ng/l	100		103	51-123			
Dieldrin	90.8	5.0	ng/l	100		91	48-123			
Endosulfan I	78.1	5.0	ng/l	100		78	14-131			
Endosulfan II	81.6	5.0	ng/l	100		82	40-121			
Endosulfan sulfate	109	5.0	ng/l	100		109	44-140			
Endrin	92.4	5.0	ng/l	100		92	40-143			
Endrin aldehyde	87.4	5.0	ng/l	100		87	18-136			
gamma-BHC (Lindane)	89.7	5.0	ng/l	100		90	49-117			
Heptachlor	89.0	5.0	ng/l	100		89	31-130			
Heptachlor epoxide	87.6	5.0	ng/l	100		88	49-122			
Surr: Decachlorobiphenyl	98.6		ng/l	100		99	0.1-118			
Surr: Tetrachloro-meta-xylene	78.7		ng/l	100		79	12-117			
LCS (W6A0222-BS2)				Analyzed:	01/21/16 23:2	25				





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#### Chlorinated Pesticides and/or PCBs - Quality Control

#### Batch W6A0222 - EPA 608

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS (W6A0222-BS2)				Analyzed: (	01/21/16 23:2	25				
4,4´-DDD	86.5	5.0	ng/l	100		87	42-133			
4,4´-DDE	84.2	5.0	ng/l	100		84	33-126			
4,4´-DDT	92.7	5.0	ng/l	100		93	35-147			
Aldrin	80.1	5.0	ng/l	100		80	18-117			
alpha-BHC	84.9	5.0	ng/l	100		85	47-119			
beta-BHC	91.4	5.0	ng/l	100		91	53-123			
delta-BHC	99.0	5.0	ng/l	100		99	51-123			
Dieldrin	86.3	5.0	ng/l	100		86	48-123			
Endosulfan I	74.3	5.0	ng/l	100		74	14-131			
Endosulfan II	77.4	5.0	ng/l	100		77	40-121			
Endosulfan sulfate	109	5.0	ng/l	100		109	44-140			
Endrin	87.5	5.0	ng/l	100		88	40-143			
Endrin aldehyde	82.1	5.0	ng/l	100		82	18-136			
gamma-BHC (Lindane)	85.6	5.0	ng/l	100		86	49-117			
Heptachlor	83.3	5.0	ng/l	100		83	31-130			
Heptachlor epoxide	83.3	5.0	ng/l	100		83	49-122			
Surr: Decachlorobiphenyl	92.1		ng/l	100		92	0.1-118			
Surr: Tetrachloro-meta-xylene	77.4		ng/l	100		77	12-117			
LCS Dup (W6A0222-BSD1)					01/21/16 22:5					
4,4´-DDD	86.0	5.0	ng/l	100		86	42-133	6	30	
4,4´-DDE	82.0	5.0	ng/l	100		82	33-126	9	30	
4,4´-DDT	91.9	5.0	ng/l	100		92	35-147	6	30	
Aldrin	78.8	5.0	ng/l	100		79	18-117	9	30	
alpha-BHC	81.5	5.0	ng/l	100		82	47-119	8	30	
beta-BHC	91.4	5.0	ng/l	100		91	53-123	4	30	
delta-BHC	98.0	5.0	ng/l	100		98	51-123	5	30	
Dieldrin	84.5	5.0	ng/l	100		85	48-123	7	30	
Endosulfan I	72.5	5.0	ng/l	100		73	14-131	7	30	
Endosulfan II	76.7	5.0	ng/l	100		77	40-121	6	30	
Endosulfan sulfate	103	5.0	ng/l	100		103	44-140	6	30	
Endrin	84.6	5.0	ng/l	100		85	40-143	9	30	
Endrin aldehyde	79.7	5.0	ng/l	100		80	18-136	9	30	
gamma-BHC (Lindane)	82.1	5.0	ng/l	100		82	49-117	9	30	
Heptachlor	81.8	5.0	ng/l	100		82	31-130	8	30	
Heptachlor epoxide	81.5	5.0	ng/l	100		82	49-122	7	30	
Surr: Decachlorobiphenyl	90.8		ng/l	100		91	0.1-118			
Surr: Tetrachloro-meta-xylene	72.5		ng/l	100	04/04/40 00 -	73	12-117			
LCS Dup (W6A0222-BSD2)	05.0	<b>5</b> 0			01/21/16 23:5		40.400	40		
4,4´-DDD	95.3	5.0	ng/l	100		95	42-133	10	30	





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#### Chlorinated Pesticides and/or PCBs - Quality Control

#### Batch W6A0222 - EPA 608

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS Dup (W6A0222-BSD2)				Analyzed: 0	)1/21/16 23:	56				
4,4'-DDE	90.5	5.0	ng/l	100		90	33-126	7	30	
4,4'-DDT	101	5.0	ng/l	100		101	35-147	9	30	
Aldrin	86.2	5.0	ng/l	100		86	18-117	7	30	
alpha-BHC	89.9	5.0	ng/l	100		90	47-119	6	30	
beta-BHC	97.4	5.0	ng/l	100		97	53-123	6	30	
delta-BHC	105	5.0	ng/l	100		105	51-123	5	30	
Dieldrin	91.4	5.0	ng/l	100		91	48-123	6	30	
Endosulfan I	78.7	5.0	ng/l	100		79	14-131	6	30	
Endosulfan II	84.0	5.0	ng/l	100		84	40-121	8	30	
Endosulfan sulfate	109	5.0	ng/l	100		109	44-140	0.05	30	
Endrin	93.8	5.0	ng/l	100		94	40-143	7	30	
Endrin aldehyde	93.7	5.0	ng/l	100		94	18-136	13	30	
gamma-BHC (Lindane)	89.9	5.0	ng/l	100		90	49-117	5	30	
Heptachlor	92.8	5.0	ng/l	100		93	31-130	11	30	
Heptachlor epoxide	87.7	5.0	ng/l	100		88	49-122	5	30	
Surr: Decachlorobiphenyl	100		ng/l	100		100	0.1-118			
Surr: Tetrachloro-meta-xylene	82.9		ng/l	100		83	12-117			

Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods - Quality Control

#### Batch W6A0119 - EPA 353.2

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers	
Blank (W6A0119-BLK1)		Analyzed: 01/05/16 16:23									
NO2+NO3 as N	ND	100	ug/l								
LCS (W6A0119-BS1)				Analyzed: (	01/05/16 16	:25					
NO2+NO3 as N	1030	100	ug/l	1000		103	90-110				
Matrix Spike (W6A0119-MS1)	Source	Analyzed: 01/05/16 16:30									
NO2+NO3 as N	2040	100	ug/l	2000	ND	102	90-110				
Matrix Spike (W6A0119-MS2)	Source	e: 6A05038-05		Analyzed: 01/05/16 16:36							
NO2+NO3 as N	2010	100	ug/l	2000	ND	100	90-110				
Matrix Spike Dup (W6A0119-MSD1)	Source	e: 6A05038-01		Analyzed: 01/05/16 16:32							
NO2+NO3 as N	2080	100	ug/l	2000	ND	104	90-110	2	20		
Matrix Spike Dup (W6A0119-MSD2)	Source	e: 6A05038-05		Analyzed: (	01/05/16 16	:38					
NO2+NO3 as N	2030	100	ug/l	2000	ND	101	90-110	0.9	20		
Batch W6A0142 - SM 2540D											
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers	
Blank (W6A0142-BLK1)				Analyzed: 01/05/16 19:15							
Total Suspended Solids	ND	5	mg/l								



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Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods - Quality Control

Batch W6A0142 - SM 2540D										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Duplicate (W6A0142-DUP1)	Sourc	e: 6A05031-01		Analyzed: 0	1/05/16 19	:15				
Total Suspended Solids	29.0	5	mg/l			7	20			
Duplicate (W6A0142-DUP2)	Source: 6A05031-02 Analyzed: 01/0				1/05/16 19	:15				
Total Suspended Solids	41.0	5	mg/l		39.0			5	20	
Batch W6A0148 - SM 2540D										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0148-BLK1)				Analyzed: 0	1/05/16 21	:10				
Total Suspended Solids	ND	5	mg/l							
Duplicate (W6A0148-DUP1)	Sourc	e: 6A05038-05		Analyzed: 0	1/05/16 21	:10				
Total Suspended Solids	ND	5	mg/l		0.00			NR	20	
Duplicate (W6A0148-DUP2)	Sourc	e: 6A05043-01		Analyzed: 0	1/05/16 21	:10				
Total Suspended Solids	14.0	5	mg/l		13.0			7	20	
Batch W6A0215 - EPA 365.1										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0215-BLK1)		Analyzed: 01/06/16 18:58								
o-Phosphate as P	ND	0.0020	mg/l							
LCS (W6A0215-BS1)				Analyzed: 0	1/06/16 19	:00				
o-Phosphate as P	0.0492	0.0020	mg/l	0.0500		98	90-110			
Duplicate (W6A0215-DUP1)	Sourc	e: 6A06041-01		Analyzed: 0	1/06/16 19	:07				
o-Phosphate as P	0.00110	0.0020	mg/l		0.00142			25	20	R-03
Matrix Spike (W6A0215-MS1)	Sourc	e: 6A06043-01		Analyzed: 0	1/06/16 19	:18				
o-Phosphate as P	0.565	0.010	mg/l	0.250	0.338	91	90-110			
Matrix Spike Dup (W6A0215-MSD1)	Sourc	e: 6A06043-01		Analyzed: 01/06/16 19:20						
o-Phosphate as P	0.565	0.010	mg/l	0.250	0.338	91	90-110	NR	20	
Batch W6A0216 - EPA 365.1										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0216-BLK1)				Analyzed: 0	1/06/16 19	:33				
o-Phosphate as P, dissolved	ND	2.0	ug/l							
LCS (W6A0216-BS1)				Analyzed: 0	1/06/16 19	:34				
o-Phosphate as P, dissolved	49.7	2.0	ug/l	50.0		99	90-110			
Matrix Spike (W6A0216-MS1)	Sourc	e: 6A05038-05		Analyzed: 0	1/06/16 19	:37				
o-Phosphate as P, dissolved	52.0	2.0	ug/l	50.0	1.02	102	90-110			
Matrix Spike Dup (W6A0216-MSD1)	Sourc	e: 6A05038-05		Analyzed: 01/06/16 19:39						
o-Phosphate as P, dissolved	52.4	2.0	ug/l	50.0	1.02	103	90-110	0.8	20	
Batch W6A0366 - SM 2540C										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0366-BLK1)	Analyzed: 01/08/16 13:30									



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Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods - Quality Control

Batch W6A0366 - SM 2540C										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0366-BLK1)				Analyzed: 01/08/16 13:30						
Total Dissolved Solids	ND	10	mg/l							
LCS (W6A0366-BS1)				Analyzed: (	01/08/16 13	:30				
Total Dissolved Solids	801	10	mg/l	824		97	96-102			
Duplicate (W6A0366-DUP1)	Source	e: 6A05089-01		Analyzed: (	01/08/16 13	:30				
Total Dissolved Solids	80.0	10	mg/l		79.0			1	10	
Duplicate (W6A0366-DUP2)	Source	Source: 6A05093-01 Analyzed: 01/08/16 13:30								
Total Dissolved Solids	594	10	mg/l	579				3	10	
Batch W6A0621 - EPA 365.1										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0621-BLK1)				Analyzed: (	01/14/16 15	:35				
Phosphorus as P, Total	ND	0.010	mg/l							
LCS (W6A0621-BS1)				Analyzed: (	01/14/16 15	:36				
Phosphorus as P, Total	0.0495	0.010	mg/l	0.0500		99	90-110			
Duplicate (W6A0621-DUP1)	Source	e: 6A05038-05		Analyzed: (	01/14/16 15	:42				
Phosphorus as P, Total	ND	0.010	mg/l		ND			NR	20	
Matrix Spike (W6A0621-MS1)	Source: 6A05038-05		Analyzed: (	01/14/16 15	:39					
Phosphorus as P, Total	0.0458	0.010	mg/l	0.0500	ND	92	90-110			
Matrix Spike (W6A0621-MS2)	Source: 6A05089-01		Analyzed: (	01/14/16 15	:45					
Phosphorus as P, Total	0.274	0.020	mg/l	0.100	0.169	105	90-110			
Matrix Spike Dup (W6A0621-MSD1)	Source	e: 6A05038-05		Analyzed: (	01/14/16 15	:40				
Phosphorus as P, Total	0.0466	0.010	mg/l	0.0500	ND	93	90-110	2	20	
Matrix Spike Dup (W6A0621-MSD2)	Source	e: 6A05089-01		Analyzed: 01/14/16 15:46						
Phosphorus as P, Total	0.270	0.020	mg/l	0.100	0.169	101	90-110	1	20	
Batch W6A0686 - EPA 365.1										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0686-BLK1)				Analyzed: (		:06				
Phosphorus, Dissolved	ND	0.010	mg/l	<b>,</b>						
LCS (W6A0686-BS1)			0	Analyzed: (	01/20/16 14	:07				
Phosphorus, Dissolved	0.0504	0.010	mg/l	0.0500		101	90-110			
Duplicate (W6A0686-DUP1)		e: 6A05038-05	0	Analyzed: (	01/20/16 14					
Phosphorus, Dissolved	ND	0.010	mg/l	<b>y</b>	ND			NR	20	
Matrix Spike (W6A0686-MS1)	Source	e: 6A05038-05	0	Analyzed: (	01/20/16 14	:10				
Phosphorus, Dissolved	0.0509	0.010	mg/l	0.0500	ND	102	90-110			
Matrix Spike (W6A0686-MS2)		e: 6A05089-01	U	Analyzed: (		:16				
Phosphorus, Dissolved	0.191	0.010	mg/l	0.0500	0.145	92	90-110			
Matrix Spike Dup (W6A0686-MSD1)		e: 6A05038-05	5	Analyzed: (						
Phosphorus, Dissolved	0.0504	0.010	mg/l	0.0500	ND	101	90-110	1	20	
Matrix Spike Dup (W6A0686-MSD2)		e: 6A05089-01	5	Analyzed: (						
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Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods - Quality Control

Batch W6A0686 - EPA 365.1										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Phosphorus, Dissolved	0.193	0.010	mg/l	0.0500	0.145	96	90-110	1	20	
Batch W6A0812 - EPA 365.1										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0812-BLK1)				Analyzed: 0	1/20/16 15	:00				
Phosphorus, Dissolved	ND	0.010	mg/l							
LCS (W6A0812-BS1)				Analyzed: 0	1/20/16 15	:02				
Phosphorus, Dissolved	0.0512	0.010	mg/l	0.0500		102	90-110			
Duplicate (W6A0812-DUP1)	Sourc	e: 6A05038-01		Analyzed: 0	1/20/16 15	:09				
Phosphorus, Dissolved	ND	0.010	mg/l		0.00183			NR	20	R-03
Matrix Spike (W6A0812-MS1)	Sourc	e: 6A06043-01		Analyzed: 0	1/20/16 15	:05				
Phosphorus, Dissolved	0.394	0.020	mg/l	0.100	0.296	98	90-110			
Matrix Spike Dup (W6A0812-MSD1)	Sourc	e: 6A06043-01		Analyzed: 0	1/20/16 15	:06				
Phosphorus, Dissolved	0.390	0.020	mg/l	0.100	0.296	94	90-110	1	20	
Batch W6A1015 - EPA 350.1										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A1015-BLK1)				Analyzed: 0	1/21/16 16	:25				
Ammonia as N	ND	0.10	mg/l							
LCS (W6A1015-BS1)				Analyzed: 0	1/21/16 16	:25				
Ammonia as N	0.241	0.10	mg/l	0.250		96	90-110			
Matrix Spike (W6A1015-MS1)	Sourc	e: 6A05038-05		Analyzed: 0	01/21/16 16	:25				
Ammonia as N	0.239	0.10	mg/l	0.250	ND	96	90-110			
Matrix Spike Dup (W6A1015-MSD1)	Sourc	e: 6A05038-05		Analyzed: 0	01/21/16 16	:25				
Ammonia as N	0.230	0.10	mg/l	0.250	ND	92	90-110	4	15	

Metals by EPA 200 Series Methods - Quality Control

## Batch W6A0296 - EPA 200.7

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0296-BLK1)				Analyzed: (	01/12/16 14	:25				
Calcium, Total	ND	0.100	mg/l							
LCS (W6A0296-BS1)				Analyzed: (	01/12/16 14	:31				
Calcium, Total	48.3	0.100	mg/l	50.2		96	85-115			
Matrix Spike (W6A0296-MS1)	Sourc	e: 6A05081-01		Analyzed: (	01/12/16 15	:32				
Calcium, Total	65.4	0.100	mg/l	50.2	18.0	94	70-130			
Matrix Spike (W6A0296-MS2)	Sourc	e: 6A05008-05		Analyzed: (	01/12/16 15	:37				
Calcium, Total	50.3	0.100	mg/l	50.2	4.67	91	70-130			
Matrix Spike Dup (W6A0296-MSD1)	Sourc	e: 6A05081-01		Analyzed: (	01/12/16 15	:35				
Calcium, Total	65.7	0.100	mg/l	50.2	18.0	95	70-130	0.5	30	

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## Metals by EPA 200 Series Methods - Quality Control

#### Batch W6A0296 - EPA 200.7

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Matrix Spike Dup (W6A0296-MSD2)	Source	e: 6A05008-05		Analyzed: (	01/12/16 15	:40				
Calcium, Total	50.5	0.100	mg/l	50.2	4.67	91	70-130	0.5	30	
Batch W6A0301 - EPA 200.8										
Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0301-BLK1)				Analyzed: (	01/13/16 12	:12				
Copper, Total	ND	0.50	ug/l							
LCS (W6A0301-BS1)				Analyzed: (	01/13/16 11	:54				
Copper, Total	48.2	0.50	ug/l	50.0		96	85-115			
Matrix Spike (W6A0301-MS1)	Source	e: 6A05038-01		Analyzed: (	01/13/16 12	:51				
Copper, Total	48.1	0.50	ug/l	50.0	0.479	95	70-130			
Matrix Spike (W6A0301-MS2)	Source	e: 6A05038-05		Analyzed: (	01/13/16 13	:47				
Copper, Total	46.3	0.50	ug/l	50.0	ND	93	70-130			
Matrix Spike Dup (W6A0301-MSD1)	Source	e: 6A05038-01		Analyzed: (	01/13/16 12	:55				
Copper, Total	48.8	0.50	ug/l	50.0	0.479	97	70-130	1	30	
Matrix Spike Dup (W6A0301-MSD2)	Source	e: 6A05038-05		Analyzed: (	01/13/16 13	:51				
Copper, Total	48.9	0.50	ug/l	50.0	ND	98	70-130	5	30	
			5							

Pyrethroid Pesticides by GC/MS SIM - Quality Control

#### Batch W6A0864 - GC/MS NCI-SIM

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0864-BLK1)				Analyzed: (	01/22/16 23	:13				
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							
Dichloran	ND	2.0	ng/l							
Fenpropathrin (Danitol)	ND	2.0	ng/l							
Fenvalerate/Esfenvalerate	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							
Surr: Perylene-d12	174		ng/l	250		70	2-205			
Surr: Triphenyl phosphate	212		ng/l	250		85	6-222			
LCS (W6A0864-BS1)				Analyzed: (	01/22/16 23	:46				





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#### Pyrethroid Pesticides by GC/MS SIM - Quality Control

#### Batch W6A0864 - GC/MS NCI-SIM

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS (W6A0864-BS1)				Analyzed: (	01/22/16 23	46				
Allethrin	41.2	2.0	ng/l	50.0		82	23-149			
Bifenthrin	54.1	2.0	ng/l	50.0		108	26-153			
Cyfluthrin	42.8	2.0	ng/l	50.0		86	3-168			
Cypermethrin	43.4	2.0	ng/l	50.0		87	2-169			
Deltamethrin/Tralomethrin	28.1	2.0	ng/l	50.0		56	0.1-252			
Dichloran	45.1	2.0	ng/l	50.0		90	53-161			
Fenpropathrin (Danitol)	54.6	2.0	ng/l	50.0		109	28-154			
Fenvalerate/Esfenvalerate	41.2	2.0	ng/l	50.0		82	35-133			
L-Cyhalothrin	32.7	2.0	ng/l	50.0		65	9-214			
Pendimethalin	48.0	2.0	ng/l	50.0		96	41-158			
Permethrin	46.5	5.0	ng/l	50.0		93	31-154			
Prallethrin	38.1	2.0	ng/l	50.0		76	28-143			
Sumithrin (Phenothrin)	65.0	10	ng/l	50.0		130	12-200			
Tefluthrin	38.5	2.0	ng/l	50.0		77	48-161			
Surr: Perylene-d12	224		ng/l	250		90	2-205			
Surr: Triphenyl phosphate	283		ng/l	250		113	6-222			
LCS Dup (W6A0864-BSD1)				Analyzed: (	01/23/16 00	18				
Allethrin	43.1	2.0	ng/l	50.0		86	23-149	5	30	
Bifenthrin	53.3	2.0	ng/l	50.0		107	26-153	2	30	
Cyfluthrin	45.7	2.0	ng/l	50.0		91	3-168	7	30	
Cypermethrin	50.9	2.0	ng/l	50.0		102	2-169	16	30	
Deltamethrin/Tralomethrin	30.4	2.0	ng/l	50.0		61	0.1-252	8	30	
Dichloran	52.7	2.0	ng/l	50.0		105	53-161	16	30	
Fenpropathrin (Danitol)	56.4	2.0	ng/l	50.0		113	28-154	3	30	
Fenvalerate/Esfenvalerate	46.1	2.0	ng/l	50.0		92	35-133	11	30	
L-Cyhalothrin	32.3	2.0	ng/l	50.0		65	9-214	1	30	
Pendimethalin	45.3	2.0	ng/l	50.0		91	41-158	6	30	
Permethrin	52.6	5.0	ng/l	50.0		105	31-154	12	30	
Prallethrin	40.6	2.0	ng/l	50.0		81	28-143	6	30	
Sumithrin (Phenothrin)	59.7	10	ng/l	50.0		119	12-200	8	30	
Tefluthrin	39.7	2.0	ng/l	50.0		79	48-161	3	30	
Surr: Perylene-d12	232		ng/l	250		93	2-205			
Surr: Triphenyl phosphate	282		ng/l	250		113	6-222			

## Semivolatile Organic Compounds by GC/MS - Quality Control

#### Batch W6A0444 - EPA 525.2

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0444-BLK1)				Analyzed: (	01/12/16 17	:43				

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Semivolatile Organic Compounds by GC/MS - Quality Control

#### Batch W6A0444 - EPA 525.2

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
Blank (W6A0444-BLK1)					01/12/16 17:4	3				
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							
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 (Prothiofos)	ND	10	ng/l							
Trichloronate	ND	10	ng/l							
Surr: 1,3-Dimethyl-2-nitrobenzene	506		ng/l	500		101	76-128			
Surr: Triphenyl phosphate	535		ng/l	500		107	40-163			
LCS (W6A0444-BS1)					01/12/16 18:0	8				
Azinphos methyl (Guthion)	42.1	10	ng/l	50.0		84	0.1-188			
Bolstar	37.4	10	ng/l	50.0		75	11-166			
Chlorpyrifos	47.9	10	ng/l	50.0		96	37-169			
Coumaphos	43.8	10	ng/l	50.0		88	0.1-225			
Demeton-o	34.3	10	ng/l	50.0		69	0.1-211			
Demeton-s	47.6	10	ng/l	50.0		95	0.1-213			
Diazinon	47.5	10	ng/l	50.0		95	43-152			
Dichlorvos	35.4	10	ng/l	50.0		71	46-133			
Dimethoate	51.0	10	ng/l	50.0		102	10-234			
Disulfoton	50.2	10	ng/l	50.0		100	0.1-212			
Ethoprop	50.8	10	ng/l	50.0		102	53-163			
Ethyl parathion	45.9	10	ng/l	50.0		92	7-230			

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Date Received:01/05/16 12:11Date Reported:01/28/16 11:04

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Semivolatile Organic Compounds by GC/MS - Quality Control

#### Batch W6A0444 - EPA 525.2

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS (W6A0444-BS1)				Analyzed:	01/12/16 18:	08				
Fensulfothion	44.6	10	ng/l	50.0		89	0.1-265			
Fenthion	65.9	10	ng/l	50.0		132	20-177			
Malathion	56.0	10	ng/l	50.0		112	14-175			
Merphos	36.6	10	ng/l	50.0		73	28-181			
Methyl parathion	47.2	10	ng/l	50.0		94	0.1-252			
Mevinphos	43.1	10	ng/l	50.0		86	14-202			
Naled	8.90	10	ng/l	50.0		18	0.1-240			
Phorate	49.8	10	ng/l	50.0		100	26-180			
Ronnel	50.6	10	ng/l	50.0		101	34-154			
Stirophos	55.6	10	ng/l	50.0		111	0.1-188			
Tokuthion (Prothiofos)	38.6	10	ng/l	50.0		77	23-159			
Trichloronate	48.1	10	ng/l	50.0		96	34-153			
Surr: 1,3-Dimethyl-2-nitrobenzene	516		ng/l	500		103	76-128			
Surr: Triphenyl phosphate	520		ng/l	500		104	40-163			
LCS Dup (W6A0444-BSD1)				Analyzed:	01/12/16 18:	34				
Azinphos methyl (Guthion)	29.4	10	ng/l	50.0		59	0.1-188	35	30	Q-12
Bolstar	16.2	10	ng/l	50.0		32	11-166	79	30	Q-12
Chlorpyrifos	52.6	10	ng/l	50.0		105	37-169	9	30	
Coumaphos	31.2	10	ng/l	50.0		62	0.1-225	34	30	Q-12
Demeton-o	27.2	10	ng/l	50.0		54	0.1-211	23	30	
Demeton-s	38.1	10	ng/l	50.0		76	0.1-213	22	30	
Diazinon	48.5	10	ng/l	50.0		97	43-152	2	30	
Dichlorvos	32.7	10	ng/l	50.0		65	46-133	8	30	
Dimethoate	57.3	10	ng/l	50.0		115	10-234	12	30	
Disulfoton	33.6	10	ng/l	50.0		67	0.1-212	39	30	Q-12
Ethoprop	50.6	10	ng/l	50.0		101	53-163	0.3	30	
Ethyl parathion	53.3	10	ng/l	50.0		107	7-230	15	30	
Fensulfothion	26.4	10	ng/l	50.0		53	0.1-265	51	30	Q-12
Fenthion	56.7	10	ng/l	50.0		113	20-177	15	30	
Malathion	66.9	10	ng/l	50.0		134	14-175	18	30	
Merphos	21.4	10	ng/l	50.0		43	28-181	52	30	Q-12
Methyl parathion	53.1	10	ng/l	50.0		106	0.1-252	12	30	
Mevinphos	36.5	10	ng/l	50.0		73	14-202	17	30	
Naled	10.7	10	ng/l	50.0		21	0.1-240	18	30	
Phorate	47.8	10	ng/l	50.0		96	26-180	4	30	
Ronnel	55.7	10	ng/l	50.0		111	34-154	10	30	
Stirophos	60.0	10	ng/l	50.0		120	0.1-188	8	30	
Tokuthion (Prothiofos)	20.4	10	ng/l	50.0		41	23-159	62	30	Q-12
Trichloronate	52.1	10	ng/l	50.0		104	34-153	8	30	

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Date Received:01/05/16 12:11Date Reported:01/28/16 11:04

Semivolatile Organic Compounds by GC/MS - Quality Control

## Batch W6A0444 - EPA 525.2

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	% REC Limits	RPD	RPD Limit	Data Qualifiers
LCS Dup (W6A0444-BSD1)				Analyzed: (	01/12/16 18:	:34				
Surr: 1,3-Dimethyl-2-nitrobenzene	528		ng/l	500		106	76-128			
Surr: Triphenyl phosphate	420		ng/l	500		84	40-163			

มารรับแรงที่มีการรับแร้ง อ้านรู้เราะรับการรับการรับการรับการรับการ

Date Received:01/05/16 12:11Date Reported:01/28/16 11:04

#### **Notes and Definitions**

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.
R-03	The RPD is not applicable for result below the reporting limit (either ND or J value).
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.
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.
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.
**	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.
ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL)
NR	Not Reportable
NR Dil	Not Reportable Dilution
Dil	Dilution
Dil dry	Dilution Sample results reported on a dry weight basis
Dil dry RPD	Dilution Sample results reported on a dry weight basis Relative Percent Difference
Dil dry RPD % Rec	Dilution Sample results reported on a dry weight basis Relative Percent Difference Percent Recovery
Dil dry RPD % Rec Sub	Dilution Sample results reported on a dry weight basis Relative Percent Difference Percent Recovery Subcontracted analysis, original report available upon request

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 Department of Health Services.

The Reporting Limit (RL) is referenced as the Laboratory's Practical Quantitation Limit (PQL) or the Detection Limit for Reporting Purposes (DLR).

All samples collected by Weck Laboratories have been sampled in accordance to laboratory SOP Number MIS002.



230 Dove Court, Santa Paula, CA 93060 office 805.933.1770 | fax 805.933.1799

# **CHAIN OF CUSTODY RECORD**

							AR	C I	Lab.		ANAL	YSIS F	REQU	ESTED	)		
SAMPLER NA (PRINT):	NE: Los Angeles DRESS: Nussery Gas NAGER: Bryn Ho ME off Jordan	PO#				MBER O		head Minnow	lenestrum 96hr.								□ EDF □ STD TAT □ 24 HR RUSH □ 48-HR RUSH □ 72-HR RUSH
SAMPLE ID	SAMPLE LOCATION	DEPTH	DATE	1	SAMPLE MATRIX	-	Ů	Ta.	Se								NOTES
	LATLG-NGA-168-8	N/A	1/5/16	9:20		2	X	X	Х								5.W.
	LAILG-NGA-64-4	NA		8:50	HZO	2		J	$\downarrow$								Runoff
$  \rangle  $			•														
					1							162	8-8	Ξ (	21		
								Te	mp. o	leg. (	- =		5%	1	11	20	
															- <del> </del>	<u> </u>	
								Ch	lorin	e <del>(mg</del>	/L) =	20	1	~	10	2-)	
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January 27, 2016

Mr. Bryn Home Pacific Ridgeline, Inc. 230 Dove Court Santa Paula, CA 93060

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, Inc.
SAMPLE I.D.:	LAILG-NGA168-8
DATE RECEIVED:	6 Jan -16
ABC LAB. NO.:	PRI0116.042

## **CHRONIC FATHEAD LARVAE SURVIVAL & GROWTH BIOASSAY**

SURVIVAL	NOEC = TUc = EC25 = EC50 =	100.00 % 1.00 >100.00 % >100.00 %
GROWTH	NOEC = TUc = IC25 = IC50 =	100.00 % 1.00 >100.00 % >100.00 %

Yours very truly, Scott Johnson Laboratory Director

# **CETIS Summary Report**

22 Jan-16 10:04 (p 1 of 2) PRI0116.042fml | 06-7249-7679

Fathead Minno											
	ow 7-d Larval Su	rvival	and Growt	h Test				Aquatio	c Bioassay &	Consulting	g Labs, Inc
Batch ID:	14-5601-6684		Test Type:	Growth-Surviva	l (7d)		1	Analyst:			
Start Date:	06 Jan-16 14:20	I	Protocol:	EPA/821/R-02-	013 (2002)			Diluent: L	aboratory Wat	er	
Ending Date:	13 Jan-16 14:40	;	Species:	Pimephales pro	melas		E	Brine: N	lot Applicable		
Duration:	7d Oh	;	Source:	Aquatic Biosyst	ems, CO		,	Age:			
Sample ID:	01-3300-1777	(	Code:	PRI0116.042fm	nl		(	Client: P	acific Ridgelin	e, inc.	
Sample Date:	05 Jan-16 09:20	1	Material:	Sample Water			F	Project: N	lursery Grower	rs Associati	ion
Receive Date:	06 Jan-16 13:12	;	Source:	Bioassay Repo	rt						
Sample Age:	29h (12.5 °C)	:	Station:	LAILG-NGA-16	8-8						
Comparison S	ummary				<u> </u>						
Analysis ID	Endpoint		NOEL	LOEL	TOEL	PMSD	TU	Method	t l		
18-6090-7109	7d Survival Rate	)	100	>100	NA	4.08%	1	Equal \	/ariance t Two	-Sample Te	est
12-6624-7529	Mean Dry Bioma	ass-mg	100	>100	NA	9.49%	1	Equal \	/ariance t Two	-Sample Te	est
Point Estimate	e Summary										
Analysis ID	Endpoint		Level	%	95% LCL	95% UCL	τU	Method	d		
00-9915-8764	7d Survival Rate	)	EC5	>100	N/A	N/A	<1	Linear	Interpolation (I	CPIN)	
			EC10	>100	N/A	N/A	<1				
			EC15	>100	N/A	N/A	<1				
			EC20	>100	N/A	N/A	<1				
			EC25	>100	N/A	N/A	<1				
			EC40	>100	N/A	N/A	<1				
			EC50	>100	N/A	N/A	<1				
16-7664-5074	Mean Dry Bioma	ass-mg	IC5	>100	N/A	N/A	<1	Linear	Interpolation (I	CPIN)	
			IC10	>100	N/A	N/A	<1				
			IC15	>100	N/A	N/A	<1				
			IC20	>100	N/A	N/A	<1				
			IC25	>100	N/A	N/A	<1				
			IC40	>100	N/A	N/A	<1				
			IC50	>100	N/A	N/A	<1				
Test Acceptab	oility										
Analysis ID	Endpoint		Attrib			TAC Limi	its	Overla	•		
Analysis ID 00-9915-8764	Endpoint 7d Survival Rate		Contr	ol Resp	1	0.8 - NL	its	Yes	Passes A	cceptability	
Analysis ID 00-9915-8764 18-6090-7109	Endpoint 7d Survival Rate 7d Survival Rate	•	Contr Contr	ol Resp ol Resp	1 1	0.8 - NL 0.8 - NL	its	Yes Yes	Passes A Passes A	cceptability	/ Criteria
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma	e ass-mg	Contr Contr Contr	ol Resp ol Resp ol Resp	1 1 0.3037	0.8 - NL 0.8 - NL 0.25 - NL	its	Yes Yes Yes	Passes A Passes A Passes A	cceptability cceptability cceptability	v Criteria v Criteria
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma	ass-mg ass-mg	Contr Contr Contr Contr	ol Resp ol Resp ol Resp ol Resp	1 1 0.3037 0.3037	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL	its	Yes Yes Yes Yes	Passes A Passes A Passes A Passes A Passes A	acceptability acceptability acceptability acceptability	v Criteria v Criteria v Criteria
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma	ass-mg ass-mg	Contr Contr Contr Contr	ol Resp ol Resp ol Resp ol Resp	1 1 0.3037	0.8 - NL 0.8 - NL 0.25 - NL	its	Yes Yes Yes	Passes A Passes A Passes A Passes A Passes A	cceptability cceptability cceptability	v Criteria v Criteria v Criteria
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma	ass-mg ass-mg	Contr Contr Contr Contr	ol Resp ol Resp ol Resp ol Resp	1 1 0.3037 0.3037	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL	its	Yes Yes Yes Yes	Passes A Passes A Passes A Passes A Passes A	acceptability acceptability acceptability acceptability	v Criteria v Criteria v Criteria
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-%	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type	e ass-mg ass-mg ass-mg <b>Coun</b> t	Contr Contr Contr Contr PMSI	ol Resp ol Resp ol Resp ol Resp D <b>95% LCL</b>	1 1 0.3037 0.3037 0.09491 95% UCL	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min	Max	Yes Yes Yes Yes Yes	Passes A Passes A Passes A Passes A Below Ac	cceptability cceptability cceptability cceptability cceptability CV%	v Criteria v Criteria v Criteria Criteria <b>%Effect</b>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma	e ass-mg ass-mg ass-mg <b>Coun</b> t	Contr Contr Contr Contr PMSI t Mean	ol Resp ol Resp ol Resp ol Resp D <b>95% LCL</b> 1	1 1 0.3037 0.3037 0.09491	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min		Yes Yes Yes Yes Yes <b>Std Er</b>	Passes A Passes A Passes A Passes A Below Ac <b>Std Dev</b> 0	cceptability cceptability cceptability cceptability cceptability CV% 0.0%	v Criteria v Criteria v Criteria Criteria <b>%Effect</b> 0.0%
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control	e ass-mg ass-mg <u>Coun</u> 4 4	Contr Contr Contr Contr PMSI	ol Resp ol Resp ol Resp ol Resp D <b>95% LCL</b> 1	1 1 0.3037 0.3037 0.09491 <b>95% UCL</b> 1	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min	Max 1	Yes Yes Yes Yes Yes	Passes A Passes A Passes A Passes A Below Ac <b>Std Dev</b> 0	cceptability cceptability cceptability cceptability cceptability CV%	v Criteria v Criteria v Criteria Criteria <b>%Effect</b>
12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control mass-mg Summa	e ass-mg ass-mg ass-mg <u>Count</u> 4 4 a <b>ry</b>	Contr Contr Contr PMSI t Mean 1 0.966	ol Resp ol Resp ol Resp ol Resp O <b>95% LCL</b> 1 57 0.9054	1 1 0.3037 0.3037 0.09491 <b>95% UCL</b> 1 1	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333	<b>Max</b> 1 1	Yes Yes Yes Yes Std Err 0 0 0.0192	Passes A Passes A Passes A Below Ac <b>Std Dev</b> 0 5 0.03849	cceptability cceptability cceptability cceptability ceptability 0.0% 3.98%	v Criteria v Criteria v Criteria Criteria <b>%Effect</b> 0.0% 3.33%
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-%	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Megative Control mass-mg Summa Control Type	e ass-mg ass-mg ass-mg Count 4 4 ary Count	Contr Contr Contr PMSI t Mean 1 0.966	ol Resp ol Resp ol Resp ol Resp ol Resp ol <b>95% LCL</b> 7 0.9054 95% LCL	1 1 0.3037 0.3037 0.09491 95% UCL 1 1 95% UCL	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min	Max 1 1 Max	Yes Yes Yes Yes Std Err 0 0.0192 Std Err	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV%	<ul> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>%Effect</li> <li>0.0%</li> <li>3.33%</li> <li>%Effect</li> </ul>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-%	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control mass-mg Summa	e ass-mg ass-mg ass-mg Count 4 4 ary Count	Contr Contr Contr PMSI t Mean 1 0.966	ol Resp ol Resp ol Resp ol Resp ol Resp ol <b>95% LCL</b> 1 57 0.9054 <b>95% LCL</b> 57 0.2747	1 1 0.3037 0.3037 0.09491 <b>95% UCL</b> 1 1	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333	<b>Max</b> 1 1	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182	cceptability cceptability cceptability cceptability ceptability 0.0% 3.98%	v Criteria v Criteria v Criteria Criteria <b>%Effect</b> 0.0% 3.33%
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control mass-mg Summa Control Type Negative Control	count A A A A A A A A A A A A A A A A A A A	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303	ol Resp ol Resp ol Resp ol Resp ol Resp ol <b>95% LCL</b> 1 0.9054 <b>95% LCL</b> 07 0.2747	1 1 0.3037 0.09491 95% UCL 1 1 95% UCL 0.3326	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0%	<pre>/ Criteria / Criteria / Criteria Criteria // Effec 0.0% 3.33% // Effec 0.0%</pre>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100 7d Survival Ra	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control mass-mg Summa Control Type Negative Control	count A A A A A A A A A A A A A A A A A A A	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303 0.329	ol Resp ol Resp ol Resp ol Resp ol Resp D <b>95% LCL</b> 1 67 0.9054 <b>95% LCL</b> 0 95% LCL 0 0.2747 03 0.2921	1 1 0.3037 0.09491 95% UCL 1 1 95% UCL 0.3326	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0%	<pre>/ Criteria / Criteria / Criteria Criteria // Effec 0.0% 3.33% // Effec 0.0%</pre>
Analysis ID 20-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100 7d Survival Ra C-%	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control mass-mg Summa Control Type Negative Control	Count A Count 4 4 A Count 4 4 Rep 1	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303 0.329	ol Resp ol Resp ol Resp ol Resp ol Resp D <b>95% LCL</b> 1 67 0.9054 <b>95% LCL</b> 0 95% LCL 0 0.2747 03 0.2921	1 1 0.3037 0.09491 <b>95% UCL</b> 1 1 <b>95% UCL</b> 0.3326 0.3666	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0%	<ul> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>%Effec</li> <li>0.0%</li> <li>3.33%</li> <li>%Effec</li> <li>0.0%</li> </ul>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100 7d Survival Ra C-% 0	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control mass-mg Summa Control Type Negative Control ate Detail Control Type	Count A Count 4 4 A Count 4 4 Rep 1	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303 0.329 Rep 1 1	ol Resp ol Resp ol Resp ol Resp ol Resp D <b>95% LCL</b> 7 0.9054 <b>95% LCL</b> 7 0.2747 03 0.2921 <b>2 Rep 3</b> 1	1 1 0.3037 0.09491 95% UCL 1 1 95% UCL 0.3326 0.3666 Rep 4	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0%	<ul> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>%Effec</li> <li>0.0%</li> <li>3.33%</li> <li>%Effec</li> <li>0.0%</li> </ul>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100 7d Survival Ra C-% 0 100	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control mass-mg Summa Control Type Negative Control ate Detail Control Type	Count A Count A A A Count A A A Rep 1 1	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303 0.329 Rep 1 1	ol Resp ol Resp ol Resp ol Resp ol Resp D <b>95% LCL</b> 7 0.9054 <b>95% LCL</b> 7 0.2747 03 0.2921 <b>2 Rep 3</b> 1	1 1 0.3037 0.09491 95% UCL 1 1 1 95% UCL 0.3326 0.3666 Rep 4 1	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0%	<ul> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>Criteria</li> <li>%Effec</li> <li>0.0%</li> <li>3.33%</li> <li>%Effec</li> <li>0.0%</li> </ul>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior 7d Survival Ra C-% 0 100 7d Survival Ra C-%	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control mass-mg Summa Control Type Negative Control ate Detail Control Type Negative Control	Count A Count A A A Count A A A Rep 1 1	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303 0.329 Rep 2 1 3 0.933	ol Resp ol Resp ol Resp ol Resp ol Resp D <b>95% LCL</b> 7 0.9054 95% LCL 7 0.2747 03 0.2921 2 Rep 3 1 33 1	1 1 0.3037 0.09491 95% UCL 1 1 1 95% UCL 0.3326 0.3666 Rep 4 1	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0%	<pre>/ Criteria / Criteria / Criteria Criteria // Effec 0.0% 3.33% // Effec 0.0%</pre>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100 7d Survival Ra C-% 0 100 Mean Dry Bior C-%	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control Mass-mg Summa Control Type Negative Control ate Detail Control Type Negative Control mass-mg Detail	Count A A Count A A A A A A A A A A A A A A A A A A A	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303 0.329 Rep 2 1 3 0.933	ol Resp ol Res	1 1 0.3037 0.09491 <b>95% UCL</b> 1 1 <b>95% UCL</b> 0.3326 0.3666 <b>Rep 4</b> 1 1	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182 1 0.02342	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0% 7.11%	<pre>/ Criteria / Criteria / Criteria Criteria ////////////////////////////////////</pre>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100 Mean Dry Bior C-% 0 100	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control Mass-mg Summa Control Type Negative Control ate Detail Control Type Negative Control mass-mg Detail Control Type	Count 4 4 ary Count 4 4 8 Rep 1 1 0.933 Rep 1 0.285	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303 0.329 Rep 2 3 0.298	ol Resp ol Res	1 1 0.3037 0.09491 95% UCL 1 1 1 95% UCL 0.3326 0.3666 Rep 4 1 1 1 Rep 4 0.3287	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182 1 0.02342	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0% 7.11%	<pre>/ Criteria / Criteria / Criteria Criteria ////////////////////////////////////</pre>
Analysis ID 00-9915-8764 18-6090-7109 12-6624-7529 16-7664-5074 12-6624-7529 7d Survival Ra C-% 0 100 Mean Dry Bior C-% 0 100 7d Survival Ra C-% 0 100 Mean Dry Bior C-%	Endpoint 7d Survival Rate 7d Survival Rate Mean Dry Bioma Mean Dry Bioma Mean Dry Bioma ate Summary Control Type Negative Control Mass-mg Summa Control Type Negative Control ate Detail Control Type Negative Control mass-mg Detail Control Type	Count A A Count A A A A A A A A A A A A A A A A A A A	Contr Contr Contr PMSI t Mean 1 0.966 t Mean 0.303 0.329 Rep 2 3 0.298	ol Resp ol Res	1 1 0.3037 0.09491 95% UCL 1 1 95% UCL 0.3326 0.3666 Rep 4 1 1 Rep 4	0.8 - NL 0.8 - NL 0.25 - NL 0.25 - NL 0.12 - 0.3 Min 1 0.9333 Min 0.2853	Max 1 1 Max 0.328	Yes Yes Yes Yes Yes Std Ern 0 0.0192 Std Ern 37 0.0091	Passes A Passes A Passes A Below Ac r Std Dev 0 5 0.03849 r Std Dev 02 0.0182	cceptability cceptability cceptability cceptability cceptability 0.0% 3.98% CV% 6.0% 7.11%	<pre>/ Criteria / Criteria / Criteria Criteria // Effec 0.0% 3.33% %Effec 0.0% -8.45%</pre>

# **CETIS Summary Report**

Report Date: Test Code:

22 Jan-16 1	0:04 (p 2 of 2)
PRI0116.042fml	06-7249-7679

Aquatic Bioassay & Consulting Labs, Inc.

Fathead Minnow 7-d Larval Survival and Growth Test

#### 7d Survival Rate Binomials

C-%	Control Type R	Rep 1	Rep 2	Rep 3	Rep 4
0	Negative Control 1	15/15	15/15	15/15	15/15
100	1	14/15	14/15	15/15	15/15

Analyst:_____QA:____

CETIS Ar	nalytical Repo	rt					-	ort Date: Code:			04 (p 1 of 3 6-7249-7679
Fathead Mi	nnow 7-d Larval Su	irvival and	Growth Te	st				Aquatic B	ioassay & (	Consulting	y Labs, Inc.
Analysis ID	: 18-6090-7109	End	point: 7d	Survival Rate	•		CETIS Version: CETISv1.8.7				
Analyzed:	22 Jan-16 10:03	Ana	ysis: Parametric-Two Sample				Official Results: Yes				
Data Transi	form	Zeta	Alt Hyp	Trials	Seed		PMSD	Test Resu	it		
Angular (Co	rrected)	NA	C > T	NA	NA		4.08%	Passes 7d	survival rat	e	
Equal Varia	ance t Two-Sample	Test									
Control	vs C-%		Test Stat	Critical	MSD DF	P-Value	P-Type	Decision(	a:5%)		
Negative Co			1.732	1.943	0.074 6	0.0670	CDF	,	icant Effect		
ANOVA Tat	ole										
Source	Sum Squa	res	Mean Squ	Jare	DF	F Stat	P-Value	Decision(	α:5%)		
Between	0.0086720	03	0.0086720	003	1	3	0.1340	Non-Signif	icant Effect		
Error	0.0173440	1	0.0028906	67	6	_					
Total	0.0260160	1			7						
Distribution	nal Tests										
Attribute	Test			Test Stat	Critical	P-Value	Decision(	a:1%)			
Distribution	Shapiro-W	Vilk W Norr	nality	0.8489	0.6451	0.0929	Normal Di	stribution			
Distribution	Kolmogor	ov-Smirnov	ı D	0.25	0.3313	0.1599	Normal Di	stribution			
Distribution	Anderson	-Darling A2	Normality	0.6699	3.878	0.0804	Normal Di	stribution			
7d Surviva	I Rate Summary										
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1	1	1	1	1	1	0	0.0%	0.0%
100		4	0.9667	0.9054	1	0.9667	0.9333	1	0.01924	3.98%	3.33%
Angular (C	orrected) Transforr	ned Sumn	nary								
Angular (C C-%	orrected) Transforr Control Type	med Summ Count	nary Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
			-	<b>95% LCL</b> 1.441	<b>95% UCL</b> 1.442	<b>Median</b> 1.441	<b>Min</b> 1.441	<b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect 0.0%
C-%	Control Type	Count	Mean								
<b>C-%</b> 0 100	Control Type	Count 4	Mean 1.441	1.441	1.442	1.441	1.441	1.441	0	0.0%	0.0%
<b>C-%</b> 0 100	Control Type Negative Contr	Count 4	Mean 1.441	1.441	1.442	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva	Control Type Negative Contr I Rate Detail	Count 4 4 Rep 1	Mean 1.441 1.375	1.441 1.254	1.442 1.496	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva C-%	Control Type Negative Contr I Rate Detail Control Type	Count 4 4 Rep 1	Mean 1.441 1.375 Rep 2	1.441 1.254 Rep 3	1.442 1.496 <b>Rep 4</b>	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva C-% 0 100	Control Type Negative Contr I Rate Detail Control Type	Count 4 4 Rep 1 1 0.9333	Mean 1.441 1.375 Rep 2 1 0.9333	1.441 1.254 <b>Rep 3</b> 1	1.442 1.496 <b>Rep 4</b> 1	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva C-% 0 100 Angular (C	Control Type Negative Contr I Rate Detail Control Type Negative Control orrected) Transform	Count 4 4 Rep 1 1 1 0.9333 med Detail	Mean 1.441 1.375 Rep 2 1 0.9333	1.441 1.254 <b>Rep 3</b> 1 1	1.442 1.496 <b>Rep 4</b> 1	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva C-% 0 100	Control Type Negative Contr I Rate Detail Control Type Negative Control	Count 4 4 Rep 1 I 1 0.9333 med Detail Rep 1	Mean 1.441 1.375 Rep 2 1 0.9333	1.441 1.254 <b>Rep 3</b> 1	1.442 1.496 <b>Rep 4</b> 1 1	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva C-% 0 100 Angular (C C-%	Control Type Negative Contr I Rate Detail Control Type Negative Control orrected) Transforr Control Type	Count 4 4 Rep 1 I 1 0.9333 med Detail Rep 1	Mean 1.441 1.375 Rep 2 1 0.9333 Rep 2	1.441 1.254 Rep 3 1 1 Rep 3	1.442 1.496 Rep 4 1 1 Rep 4	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva C-% 0 100 Angular (C C-% 0 100	Control Type Negative Contr I Rate Detail Control Type Negative Control orrected) Transforr Control Type	Count 4 4 1 1 0.9333 med Detail Rep 1 1.441	Mean 1.441 1.375 Rep 2 1 0.9333 Rep 2 1.441	1.441 1.254 <b>Rep 3</b> 1 1 <b>Rep 3</b> 1.441	1.442 1.496 <b>Rep 4</b> 1 1 <b>Rep 4</b> 1.441	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva C-% 0 100 Angular (C C-% 0 100 7d Surviva	Control Type Negative Contr I Rate Detail Control Type Negative Control orrected) Transforr Control Type Negative Contro	Count 4 4 1 1 0.9333 med Detail Rep 1 1 1.441 1.31	Mean 1.441 1.375 Rep 2 1 0.9333 Rep 2 1.441 1.31	1.441 1.254 <b>Rep 3</b> 1 1 <b>Rep 3</b> 1.441 1.441	1.442 1.496 <b>Rep 4</b> 1 1 <b>Rep 4</b> 1.441 1.441	1.441	1.441	1.441	0	0.0%	0.0%
C-% 0 100 7d Surviva C-% 0 100 Angular (C C-% 0 100	Control Type Negative Contr I Rate Detail Control Type Negative Control orrected) Transforr Control Type Negative Contro	Count 4 4 1 1 0.9333 med Detail Rep 1 1.441 1.31 Rep 1	Mean 1.441 1.375 Rep 2 1 0.9333 Rep 2 1.441	1.441 1.254 <b>Rep 3</b> 1 1 <b>Rep 3</b> 1.441	1.442 1.496 <b>Rep 4</b> 1 1 <b>Rep 4</b> 1.441	1.441	1.441	1.441	0	0.0%	0.0%

Analyst: _____ QA:____

CETIS	i Ana	alytical Report					Report Date: Test Code:	22 Jan-16 10:04 (p 2 of 3) PRI0116.042fml   06-7249-7679
Fathea	d Minr	now 7-d Larval Survi	val and Growt	h Test			Aquatic Bi	ioassay & Consulting Labs, Inc.
Analysi Analyze		18-6090-7109 22 Jan-16 10:03	Endpoint: Analysis:	7d Survival Rate Parametric-Two Sample			CETIS Version: Official Results:	CETISv1.8.7 Yes
Graphi	cs							
7d Survival Rate	1.0       0.9       0.8       0.7       0.6       0.7       0.6       0.3       0.4       0.3       0.1       0.0	• 0 N		heject Null	Centered Corr. Angle	0.07 0.06 0.05 0.04 0.03 0.02 0.01 0.00 0.01 0.00 0.01 0.00 0.01 0.00 0.05 0.04 0.05 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	-1.0 -0.5 0.0	
			C-%				Rankits	

Analyst:_____QA:____

CETIS Ana	lytical Repo	rt						rt Date: Code:		an-16 10:0 042fml   06	6-7249-767
Fathead Minn	ow 7-d Larval Su	rvival and (	Growth Tes	it				Aquatic Bi	oassay & C	consulting	Labs, Inc.
Analysis ID:	12-6624-7529	Endp	oint: Mea	n Dry Bioma	ass-mg		CETI	S Version:	CETISv1.	8.7	
Analyzed:	22 Jan-16 10:03	Analy	v <b>sis:</b> Para	metric-Two	Sample		Offic	ial Results:	Yes		
Data Transfor	m	Zeta	Alt Hyp	Trials	Seed		PMSD	Test Resu	lt		
Untransformed	ź	NA	C > T	NA	NA		9.49%	Passes me	an dry biom	nass-mg	
Equal Varianc	ce t Two-Sample	Test									
Control	vs C-%		Test Stat	Critical	MSD DF	P-Value	P-Type	Decision(c	1:5%)		
Negative Contr	rol 100		-1.731	1.943	0.029 6	0.9329	CDF	Non-Signifi	icant Effect		
ANOVA Table											
Source	Sum Squa	ros	Mean Squ	aro	DF	F Stat	P-Value	Decision(c	x·5%)		
Between	0.0013175		0.0013175		1	2.995	0.1342		icant Effect		
Error	0.0026395		0.0004399		6						
Total	0.0039571	11			7						
Distributional	Tests										
Attribute	Test			Test Stat	Critical	P-Value	Decision(	α:1%)			
Variances	Variance I	Ratio F		1.655	47.47	0.6891	Equal Var				<u> </u>
Variances	Mod Leve	ne Equality	of Variance	1.017	13.75	0.3522	Equal Var	iances			
Variances	Levene Ec	quality of Va	riance	1.079	13.75	0.3390	Equal Var	iances			
Distribution	Shapiro-W	/ilk W Norm	ality	0.91	0.6451	0.3539	Normal Di	stribution			
			-	0.17	0.3313	0.9228	Normal Di	stribution			
	Kolmogor	ov-Smirnov	D	0.17	0.0010			othoaton			
Distribution Distribution	-	ov-Smirnov   Darling A2		0.17	3.878	0.4773	Normal Di				
Distribution Distribution	Anderson	Darling A2 I									
Distribution Distribution Mean Dry Bio	Anderson-	Darling A2 I			3.878	0.4773			Std Err	CV%	%Effect
Distribution Distribution Mean Dry Bio C-%	Anderson- mass-mg Summ Control Type	Darling A2 I ary Count	Normality	0.3497	3.878	0.4773	Normal Di	stribution	<b>Std Err</b> 0.009102	<b>CV%</b> 6.0%	%Effect
Distribution Distribution Mean Dry Bio C-% 0	Anderson-	Darling A2 I ary Count	Normality Mean	0.3497 95% LCL	3.878 95% UCL	0.4773 Median	Normal Di Min	stribution Max			
Distribution Distribution Mean Dry Bio C-% 0 100	Anderson- mass-mg Summ Control Type Negative Control	Darling A2 l ary Count 4	Mean 0.3037	0.3497 95% LCL 0.2747	3.878 95% UCL 0.3326	0.4773 Median 0.3003	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio	Anderson mass-mg Summ Control Type Negative Control mass-mg Detail	Darling A2   ary Count 4 4	Normality Mean 0.3037 0.3293	0.3497 95% LCL 0.2747 0.2921	3.878 95% UCL 0.3326 0.3666	0.4773 Median 0.3003	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-%	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 Rep 1	Mean 0.3037 0.3293 Rep 2	0.3497 95% LCL 0.2747 0.2921 Rep 3	3.878 95% UCL 0.3326 0.3666 Rep 4	0.4773 Median 0.3003	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 Mean Dry Bio C-% 0	Anderson mass-mg Summ Control Type Negative Control mass-mg Detail	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Normality Mean 0.3037 0.3293	0.3497 95% LCL 0.2747 0.2921	3.878 95% UCL 0.3326 0.3666	0.4773 Median 0.3003	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 Mean Dry Bio C-% 0 100	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 Rep 1	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287	0.4773 Median 0.3003	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 Mean Dry Bio C-% 0 100	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287	0.4773 Median 0.3003 0.327	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 Mean Dry Bio C-% 0 100	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287	0.4773 Median 0.3003 0.327	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287	0.4773 Median 0.3003 0.327	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287	0.4773 Median 0.3003 0.327	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.030 0.025 0.025 0.025 0.025 0.025	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.030 0.025 0.025 0.025 0.025 0.025	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287	0.4773 Median 0.3003 0.327 0.030 0.025 0.025 0.025 0.025 0.025	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.030 0.025 0.020 0.025 0.020 0.015 0.010	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.030 0.025 0.020 0.015 0.015 0.005 0.005	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.030 0.025 0.020 0.015 0.010 0.005 0.005	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-% 0 100 Graphics	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.020 0.025 0.020 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.010	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-% 0 100 Graphics 6.30 0.35 0.25 0.25 0.20 0.15 0.15	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.030 0.025 0.020 0.015 0.010 0.005 0.005	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-% 0 100 Graphics 0.35 0.35 0.30 0.25 0.20 0.15	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.020 0.025 0.020 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.010	Normal Di Min 0.2853	Max 0.3287	0.009102	6.0%	0.0%
Distribution Distribution Mean Dry Bio C-% 0 100 Mean Dry Bio C-% 0 100 Graphics 0.35 0.35 0.25 0.25 0.20 0.15 0.10	Anderson mass-mg Summ Control Type Negative Control omass-mg Detail Control Type	Darling A2   ary Count 4 4 4 Rep 1 0.2853	Mean           0.3037           0.3293           Rep 2           0.298	0.3497 95% LCL 0.2747 0.2921 Rep 3 0.3027 0.3407	3.878 95% UCL 0.3326 0.3666 Rep 4 0.3287 0.3133	0.4773 Median 0.3003 0.327 0.025 0.025 0.020 0.015 0.005 0.005 0.005 0.005 0.005 0.005 0.005	Normal Di Min 0.2853	Max 0.3287	0.009102 0.01171	6.0%	0.0%

QA:_ P Analyst:

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CETIS	S Ana	lytical Repo	rt						Repo Test (	rt Date: Code:			04 (p 1 of 2 06-7249-767
Fathea	d Minne	ow 7-d Larval Su	rvival and	Growt	h Test					Aquatic Bi	oassay & C	Consultin	g Labs, Inc
Analysi	is ID:	00-9915-8764	End	point:	7d Survival Rate	e			CETI	S Version:	CETISv1.	8.7	
Analyz		22 Jan-16 10:03	Anal	ysis:	Linear Interpola	tion (ICPIN)			Offic	al Results:	Yes		
Linear	Interpo	lation Options			· · · · · · · · · · · · · · · · · · ·								
X Tran	sform	Y Transform	Seed	ł	Resamples	Exp 95%	CL	Metho					
Linear		Linear	0		280	Yes		Two-Po	oint Interpo	lation			
Point E	Estimate	es											
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL							
EC5	>100	N/A	N/A	<1	NA	NA							
EC10	>100	N/A	N/A	<1	NA	NA							
EC15	>100	N/A	N/A	<1	NA	NA							
EC20	>100	N/A	N/A	<1	NA	NA							
EC25	>100	N/A	N/A	<1	NA	NA							
EC40	>100	N/A	N/A	<1	NA	NA							
EC50	>100	N/A	N/A	<1	NA	NA							
7d Sur		ate Summary				Calcu	lated	Variate					
C-%		ontrol Type	Count	Mean		Max	Std		Std Dev	CV%	%Effect	A	B
0	N	legative Control	4	1	1	1	0		0	0.0%	0.0%	60 50	60
100			4	0.966	67 0.9333	1	0.0	924	0.03849	3.98%	3.33%	58	60
7d Sur	vival Ra	ate Detail											
C-%		ontrol Type	Rep 1	Rep 2		Rep 4							
0	N	legative Control	1	1	1	1							
100			0.9333	0.933	33 1	1							<u></u>
7d Sur	vival R	ate Binomials											
C-%		Control Type	Rep 1	Rep 2	2 Rep 3	Rep 4							
0		Negative Control	15/15	15/15	5 15/15	15/15							
100			14/15	14/15	5 15/15	15/15							
Graphi					•								
	0.1 0.0 0	20	40 <b>C-%</b>	60	80 100								

Analyst: _____QA:___

ETIS	5 An	alytical Repo	ort						rt Date: Code:	22 Jan-16 10:04 (p 2 of 2 PRI0116.042fml   06-7249-767
Fathea	d Min	now 7-d Larval S	urvival and	d Growt	h Test				Aquatic Bi	oassay & Consulting Labs, Inc
Analysi	is ID:	16-7664-5074	Enc	Ipoint:	Mean Dry Biom	ass-mg		CETI	S Version:	CETISv1.8.7
Analyze		22 Jan-16 10:0		lysis:	Linear Interpola			Offic	ial Results:	Yes
inear	Interr	olation Options								
X Trans			n See	े d	Resamples	Exp 95% CL	Meth	od		
Linear	5101111	Linear		3331	280	Yes		Point Interpo	olation	
	-									<u></u>
Point E	suma %	95% LCL	95% UCL	ти	95% LCL	95% UCL				
Level	>10		N/A	<1	NA	NA				
C10	>10		N/A	<1	NA	NA				
C15	>10		N/A	<1	NA	NA				
C20	>10		N/A	<1	NA	NA				
C25	>10		N/A	<1	NA	NA				
IC40	>10		N/A	<1	NA	NA				
IC50	>10		N/A	<1	NA	NA				
Mean D	Drv Bi	omass-mg Summ	narv			Calcula	ted Va	riate		
C-%		Control Type	Count	Mean	Min		d Err	Std Dev	CV%	%Effect
0		Negative Control	4	0.303			09102	0.0182	6.0%	0.0%
100		<b>..</b>	4	0.329			01171	0.02342	7.11%	-8.45%
Mean [	Dry Bi	iomass-mg Detail								
C-%	•	Control Type	Rep 1	Rep 2	2 Rep 3	Rep 4				
0		Negative Control		0.298		0.3287				
100			0.3067	0.356		0.3133				
Graphi	CS									
	0.35	F F								
	0.30									
9	0.25	~								
		ра ма ма								
	0.20	- -= -								
į	ĥ									
	0.20 0.15	-								
-	0.10	- - -								
		-								
		L								
	0.05	-								
	0.05	0 20	40		80 100					

Analyst:_____QA:____

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CETIS	Measurement	Report
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								Test Code:	FIXIQTI	0.0421111110	JO-1249-1019
Fathead Minn	ow 7-d Larval S	urviva	and Growt	h Test				Aqua	tic Bioassay &	Consultin	g Labs, Inc.
Batch ID:	14-5601-6684	•		Growth-Surviva				Analyst:	1.1		
Start Date:	06 Jan-16 14:2		Protocol:	EPA/821/R-02-	. ,				Laboratory Wa	ter	
Ending Date:	13 Jan-16 14:4 7d Oh	0	Species: Source:	Pimephales pr Aquatic Biosys					Not Applicable		
Duration:			Source:	Aquatic Blosys	tems, co			Age:			
Sample ID:	01-3300-1777		Code:	PRI0116.042fn	nl			Client:	Pacific Ridgelin		
	05 Jan-16 09:2		Material:	Sample Water				Project:	Nursery Growe	rs Associal	tion
	06 Jan-16 13:1	2	Source:	Bioassay Repo							
Sample Age:	29h (12.5 °C)		Station:	LAILG-NGA-16							
Alkalinity (Ca	CO3)-mg/L										
C-%	Control Type	Coun		95% LCL	95% UCL	Min	Max	Std Ei		CV%	QA Count
0	Negative Contr		64.13	61.25	67	60	68	1.217	3.441	5.37%	0
100		8	64	64	64	64	64	0	0	0.0%	0
Overall		16	64.06			60	68				0 (0%)
Conductivity-	µmhos										
C-%	Control Type	Coun		95% LCL	95% UCL	Min	Мах	Std E		CV%	QA Count
0	Negative Contr		328.4	326	330.8	323	332	1.017	2.875	0.88%	0
100 Overall		8	590.3 459.3	584.9	595.6	580 323	597 597	2.266	6.409	1.09%	0 (0%)
		10				020					0 (0 /0)
Dissolved Ox C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	Negative Contr		8.1	7.686	8.514	7.7	9.2	0.175		6.12%	0
100	noguire conti	8	7.75	7.181	8.319	6.3	8.7	0.240		8.78%	0
Overall	•	16	7.925			6.3	9.2				0 (0%)
Hardness (Ca	CO3)-mg/L										
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	Negative Contr	8	92.13	88.68	95.57	88	97	1.457	4.121	4.47%	0
100		8	184	184	184	184	184	0	0	0.0%	0
Overall		16	138.1			88	184				0 (0%)
pH-Units											
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count
0	Negative Contr	8	8.025	7.803	8.247	7.6	8.3	0.094	02 0.2659	3.31%	0
100		8	7.513	7.243	7.782	7.1	7.9	0.114	1 0.3227	4.3%	0
Overall		16	7.769			7.1	8.3				0 (0%)
Temperature	۰°C										
C-%	Control Type	Coun			95% UCL		Max	Std E		CV%	QA Count
0	Negative Contr		24.06		24.21	24	24.5	0.062		0.73%	0
100		8	24.19		24.35	24	24.5	0.069	27 0.1959	0.81%	0
Overall		16	24.13			24	24.5				0 (0%)

Analyst:_____QA:____

# **CETIS Measurement Report**

Report	Date:	2

Fathead Minnow 7-d Larval Survival and Growth Test

Test Code:	PRI0116.042fm

Aquatic Bioassay & Consulting Labs, Inc.

Alkalinity	(CaCO3)-mg/L								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	68	68	68	63	63	63	60	60
100		64	64	64	64	64	64	64	64
Conductiv	vity-µmhos								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	328	332	323	328	330	326	329	331
100		580	596	595	595	597	584	586	589
Dissolved	i Oxygen-mg/L								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	7.8	8.4	7.7	7.8	7.9	7.9	8.1	9.2
100		8.7	8.2	7.7	7.7	7.7	7.9	7.8	6.3
Hardness	(CaCO3)-mg/L								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	97	97	97	90	90	90	88	88
100		184	184	184	184	184	184	184	184
pH-Units									
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	8.1	7.9	7.7	8.3	8.1	8.2	7.6	8.3
100	0	7.1	7.8	7.9	7.8	7.7	7.2	7.2	7.4
Temperat	ture-°C								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	24	24	24	24	24	24	24.5	24
100		24.3	24	24	24.4	24.1	24.5	24.2	24



January 27, 2016

Mr. Bryn Home Pacific Ridgeline, Inc. 230 Dove Court Santa Paula, CA 93060

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, Inc.
SAMPLE I.D.:	LAILG-NGA-168-8
DATE RECEIVED:	6 Jan -16
ABC LAB. NO.:	PRI0116.042

## **CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY**

SURVIVAL	NOEC = TUc = EC25 = EC50 =	100.00 % 1.00 >100.00 % >100.00 %
REPRODUCTION	NOEC = TUc = IC25 = IC50 =	100.00 % 1.00 >100.00 % >100.00 %

Yours very truly, Scott Johnson Laboratory Director

# **CETIS Summary Report**

								Test Code	•	1100110	.042001   00	-5815-348
Ceriodaphnia	7-d Survival and	Reproduc	tion Te	st				Aqu	iatic Bi	ioassay & C	Consulting	Labs, Inc.
Batch ID:	02-5393-4392	Test	Туре:	Reproduction-S	urvival (7d)			Analyst:				
Start Date:	06 Jan-16 14:20			EPA/821/R-02-0				Diluent:	Labo	oratory Wate	er	
Ending Date:	13 Jan-16 14:40	Spec	ies:	Ceriodaphnia du	ubia			Brine:		Applicable		
Duration:	7d Oh	Sour		Aquatic Biosyst				Age:				
Sample ID:	08-2172-7457	Code	:	PRI0116.042ce	r			Client:	Pacif	fic Ridgeline	e. Inc.	
•	05 Jan-16 09:20			Sample Water				Project:		ery Growers		n
-	06 Jan-16 13:12			Bioassay Repor	t							
Sample Age:		Stati		LAILG-NGA-16								
Comparison S	ummarv											
Analysis ID	Endpoint		NOEL	LOEL	TOEL	PMSD	τυ	Met	hod			
06-0097-3081	7d Survival Rate	•	100	>100	NA	NA	1			ct Test		
04-5707-3070			100	>100	NA	24.9%	1			h's t Test		
Point Estimate	Summary											
Analysis ID	Endpoint		Level	%	95% LCL	95% UCL	τU	Met	hod			
09-9583-7677	7d Survival Rate	;	EC5	>100	N/A	N/A	<1	Line	ear Inte	rpolation (IC	CPIN)	
			EC10	>100	N/A	N/A	<1				,	
			EC15	>100	N/A	N/A	<1					
			EC20	>100	N/A	N/A	<1					
			EC25	>100	N/A	N/A	<1					
			EC40	>100	N/A	N/A	<1					
			EC50	>100	N/A	N/A	<1					
20-3354-6189	Reproduction		IC5	>100	N/A	N/A	<1	Line	ear Inte	polation (IC	CPIN)	
			IC10	>100	N/A	N/A	<1					
			IC15	>100	N/A	N/A	<1					
			IC20	>100	N/A	N/A	<1					
			IC25	>100	N/A	N/A	<1					
			IC40	>100	N/A	N/A	<1					
			IC50	>100	N/A	N/A	<1					
Test Acceptab	ility											
Analysis ID	Endpoint		Attrib		Test Stat	TAC Limi	ts		erlap	Decision		
Analysis ID 06-0097-3081	Endpoint 7d Survival Rate		Contro	ol Resp	<b>Test Stat</b>	0.8 - NL	ts	Yes		Passes Ad	cceptability	
Test Acceptab Analysis ID 06-0097-3081 09-9583-7677	Endpoint		Contro		1 1	0.8 - NL 0.8 - NL	ts	Yes Yes	; ;	Passes Ac Passes Ac	cceptability	Criteria
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070	Endpoint 7d Survival Rate		Contro Contro Contro	ol Resp ol Resp ol Resp	1 1 16.8	0.8 - NL 0.8 - NL 15 - NL	ts	Yes Yes Yes	; ;	Passes Ad Passes Ad Passes Ad	cceptability	Criteria Criteria
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction		Contro Contro Contro Contro	ol Resp ol Resp ol Resp ol Resp	1 1 16.8 16.8	0.8 - NL 0.8 - NL 15 - NL 15 - NL		Yes Yes Yes Yes	; ;	Passes Ad Passes Ad Passes Ad Passes Ad	cceptability cceptability cceptability	Criteria Criteria Criteria
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction		Contro Contro Contro	ol Resp ol Resp ol Resp ol Resp	1 1 16.8	0.8 - NL 0.8 - NL 15 - NL		Yes Yes Yes	; ;	Passes Ad Passes Ad Passes Ad Passes Ad	cceptability	Criteria Criteria Criteria
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction		Contro Contro Contro Contro	ol Resp ol Resp ol Resp ol Resp ol Resp o	1 1 16.8 16.8 0.2485	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47		Yes Yes Yes Yes Yes	; ;	Passes Ad Passes Ad Passes Ad Passes Ad Passes Ad	cceptability cceptability cceptability cceptability	Criteria Criteria Criteria Criteria
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 7d Survival Ra C-%	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction ate Summary Control Type	Count	Contro Contro Contro PMSE	bl Resp bl Resp bl Resp bl Resp b) 95% LCL	1 1 16.8 16.8 0.2485 95% UCL	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47 Min	Max	Yes Yes Yes Yes Yes	; ;	Passes Ad Passes Ad Passes Ad Passes Ad Passes Ad Std Dev	cceptability cceptability cceptability cceptability cceptability	Criteria Criteria Criteria Criteria <b>%Effect</b>
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 7d Survival Ra C-% 0	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction	Count 10	Contro Contro Contro PMSE	ol Resp ol Resp ol Resp ol Resp ol Resp o	1 1 16.8 16.8 0.2485	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47	,	Yes Yes Yes Yes Yes	; ;	Passes Ad Passes Ad Passes Ad Passes Ad Passes Ad	cceptability cceptability cceptability cceptability cceptability cceptability cceptability cceptability	Criteria Criteria Criteria
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 7d Survival Ra C-% 0 100	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction ate Summary Control Type Negative Control	Count	Contro Contro Contro PMSE Mean	bl Resp bl Resp bl Resp bl Resp bl Resp b) 95% LCL 1	1 1 16.8 16.8 0.2485 <b>95% UCL</b> 1	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47 Min 1	, <u>Max</u> 1	Yes Yes Yes Yes Xes Xes	; ;	Passes Ad Passes Ad Passes Ad Passes Ad Passes Ad <b>Std Dev</b> 0	cceptability cceptability cceptability cceptability cceptability	Criteria Criteria Criteria Criteria <b>%Effect</b> 0.0%
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 7d Survival Ra C-% 0 100 Reproduction	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction Ate Summary Control Type Negative Control Summary	<b>Count</b> 10 10	Contro Contro Contro PMSE Mean	ol Resp ol Resp ol Resp ol Resp ol Resp o) 95% LCL 1 1	1 1 16.8 16.8 0.2485 <b>95% UCL</b> 1 1	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47 Min 1 1	, <u>Max</u> 1	Yes Yes Yes Yes Yes Yes O	; ;	Passes Ad Passes Ad Passes Ad Passes Ad Passes Ad <b>Std Dev</b> 0	cceptability cceptability cceptability cceptability cceptability cceptability cceptability cceptability	Criteria Criteria Criteria Criteria <b>%Effect</b> 0.0%
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 7d Survival Ra C-% 0 100 Reproduction C-%	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type	Count 10 10 Count	Contro Contro Contro PMSE Mean	ol Resp ol Resp ol Resp ol Resp ol Resp ol <b>95% LCL</b> 1 1 95% LCL	1 1 16.8 16.8 0.2485 95% UCL 1 1 95% UCL	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47 Min 1 1 Min	Max 1 1 Max	Yes Yes Yes Yes Yes Yes Yes Std	Err	Passes Ad Passes Ad Passes Ad Passes Ad Passes Ad Std Dev 0 0 Std Dev	cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% CV%	Criteria Criteria Criteria Criteria %Effect 0.0% 0.0% %Effect
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 <b>7d Survival Ra</b> <b>C-%</b> 0 100 <b>Reproduction</b> <b>C-%</b> 0	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction Ate Summary Control Type Negative Control Summary	Count 10 10 Count	Contro Contro Contro PMSE Mean 1	ol Resp ol Resp ol Resp ol Resp ol Resp o) 95% LCL 1 1	1 1 16.8 16.8 0.2485 <b>95% UCL</b> 1 1	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47 Min 1 1	, Max 1 1	Yes Yes Yes Yes Yes Yes O	Err Err Err 86	Passes Ad Passes Ad Passes Ad Passes Ad Passes Ad <b>Std Dev</b> 0	cceptability cceptability cceptability cceptability CCV% 0.0% 0.0%	Criteria Criteria Criteria Criteria <b>%Effect</b> 0.0% <b>%Effect</b> 0.0%
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Analysis ID D6-0097-3081 D9-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 <b>7d Survival Ra</b> <b>C-%</b> 0 100 <b>Reproduction</b> <b>C-%</b> 0 100 <b>7d Survival Ra</b>	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control	Count 10 10 Count 10	Contro Contro Contro PMSE Mean 1 1 1 16.8	bl Resp bl Res	1 1 16.8 16.8 0.2485 95% UCL 1 1 95% UCL 23.33	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47 Min 1 1 7	Мах 1 1 Мах 35	Yes Yes Yes Yes Yes Xes Yes Xes Xes Xes 2.8td 2.8td 4.2t	Err Err B6 B2	Passes Ad Passes Ad Passes Ad Passes Ad Passes Ad <b>Std Dev</b> 0 0 <b>Std Dev</b> 9.126	CCCPtability CCCPtability CCCPtability CCCPtability CCV% 0.0% 0.0% 0.0% CV% 54.32%	Criteria Criteria Criteria Criteria %Effect 0.0% 0.0% %Effect
Analysis ID D6-0097-3081 D9-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 <b>7d Survival Ra</b> <b>C</b> -% D 100 <b>Reproduction</b> <b>C</b> -% <b>C</b> -%	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control ate Detail	Count 10 10 10 10 10 10 10 Rep 1	Contro Contro Contro PMSE Mean 1 1 1 Mean 16.8 30.4	bl Resp bl Res	1 1 16.8 16.8 0.2485 <b>95% UCL</b> 1 1 <b>95% UCL</b> 23.33 40.09	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47 Min 1 1 7 8	Max 1 1 35 54	Yes Yes Yes Yes Yes Xes Yes Xes Xes Xes 2.8td 2.8td 4.2t	Err Err B6 B2	Passes Ac Passes Ac Passes Ac Passes Ac Passes Ac <b>Std Dev</b> 9.126 13.54	CCCPtability CCCPtability CCCPtability CCCPtability CCV% 0.0% 0.0% 0.0% CV% 54.32% 44.55%	Criteria Criteria Criteria Criteria <b>%Effect</b> 0.0% 0.0% -80.95%
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 7d Survival Ra C-% 0 100 Reproduction C-% 0 100 7d Survival Ra C-% 0	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control ate Detail Control Type	Count 10 10 10 10 10 10 10 Rep 1	Contro Contro Contro PMSE Mean 1 1 1 Mean 16.8 30.4 Rep 2	bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp 1 1 1 95% LCL 10.27 20.71 20.71	1 1 16.8 16.8 0.2485 95% UCL 1 1 23.33 40.09 Rep 4	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.47 Min 1 1 7 8 Rep 5	Max 1 1 35 54 Rep	Yes Yes Yes Yes Yes Xes Xes Xes Xes Xes Xes Xes Xes Xes X	Err Err B6 B2	Passes Ac Passes Ac Passes Ac Passes Ac Passes Ac Std Dev 0 0 5td Dev 9.126 13.54 Rep 8	CCCP tability CCCP tability CCCP tability CCCP tability CCCP tability CCV% 0.0% 0.0% 0.0% 0.0% CV% 54.32% 44.55% Rep 9	Criteria Criteria Criteria MEffect 0.0% 0.0% %Effect 0.0% -80.95% Rep 10
Analysis ID D6-0097-3081 D9-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 <b>7d Survival Ra</b> <b>C</b> -% 0 100 <b>Reproduction</b> <b>C</b> -% 0 100 <b>7d Survival Ra</b> <b>C</b> -% 0 100	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control ate Detail Control Type Negative Control	Count 10 10 10 10 10 10 10 <b>Rep 1</b> 1	Contro Contro Contro PMSE Mean 1 1 1 Mean 16.8 30.4 Rep 2 1	bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp 1 1 1 95% LCL 10.27 20.71 20.71 2 Rep 3 1	1 1 16.8 16.8 0.2485 95% UCL 1 1 1 23.33 40.09 Rep 4 1	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.47 Min 1 1 7 8 <b>Min</b> 7 8	Max 1 1 35 54 <b>Rep</b> 1	Yes Yes Yes Yes Yes Xes Yes Xes Xes Xes Xes Xes Xes Xes Xes Xes X	Err Err B6 B2	Passes Ac Passes Ac Passes Ac Passes Ac Passes Ac Passes Ac <b>Std Dev</b> 9.126 13.54 <b>Rep 8</b> 1	cceptability cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% 0.0% 54.32% 44.55% Rep 9 1	Criteria Criteria Criteria <b>%Effect</b> 0.0% 0.0% <b>%Effect</b> 0.0% -80.95% <b>Rep 10</b> 1
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 7d Survival Ra C-% 0 100 Reproduction C-% 0 100 7d Survival Ra C-% 0 100 Reproduction Reproduction	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control ate Detail Control Type Negative Control	Count 10 10 10 10 10 10 10 <b>Rep 1</b> 1	Contro Contro Contro PMSE Mean 1 1 1 Mean 16.8 30.4 Rep 2 1	bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp 1 1 1 95% LCL 10.27 20.71 20.71 20.71	1 1 16.8 16.8 0.2485 95% UCL 1 1 1 23.33 40.09 Rep 4 1	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.47 Min 1 1 7 8 <b>Min</b> 7 8	Max 1 1 35 54 <b>Rep</b> 1	Yes Yes Yes Yes Yes Yes Xes Xes 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1	Err Err 86 82	Passes Ac Passes Ac Passes Ac Passes Ac Passes Ac Passes Ac <b>Std Dev</b> 9.126 13.54 <b>Rep 8</b> 1	cceptability cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% 0.0% 54.32% 44.55% Rep 9 1	Criteria Criteria Criteria <b>%Effect</b> 0.0% 0.0% <b>%Effect</b> 0.0% -80.95% <b>Rep 10</b> 1
Analysis ID De-0097-3081 D9-9583-7677 D4-5707-3070 20-3354-6189 D4-5707-3070 <b>7d Survival Ra</b> <b>C-%</b> D 100 <b>Reproduction</b> <b>C-%</b> D 100 <b>Reproduction</b> <b>C-%</b> D 100 <b>Reproduction</b> <b>C-%</b>	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control ate Detail Control Type Negative Control Detail	Count 10 10 10 10 10 10 10 10 1 1 1 1 1 Rep 1	Contro Contro Contro PMSE Mean 1 1 1 1 Mean 16.8 30.4 Rep 2 1 1	bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp bl Resp 1 1 1 95% LCL 10.27 20.71 20.71 20.71	1 1 16.8 16.8 0.2485 95% UCL 1 1 1 23.33 40.09 Rep 4 1 1	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.47 Min 1 1 7 8 Rep 5 1 1	Max 1 1 35 54 <b>Rep</b> 1 1	Yes Yes Yes Yes Yes Yes Xes Xes 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1	Err Err 86 82	Passes Ad Passes	CCCPtability CCCPtability CCCPtability CCCPtability CCV% 0.0% 0.0% CV% 54.32% 44.55% Rep 9 1 1	Criteria Criteria Criteria <b>%Effect</b> 0.0% 0.0% <b>%Effect</b> 0.0% -80.95% <b>Rep 10</b> 1 1
Analysis ID 06-0097-3081 09-9583-7677 04-5707-3070 20-3354-6189 04-5707-3070 7d Survival Ra C-% 0 100 Reproduction C-% 0 100 Reproduction C-% 0 100 Reproduction C-%	Endpoint 7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control ate Detail Control Type Negative Control Detail Control Type	Count 10 10 10 10 10 10 10 10 1 1 1 1 1 Rep 1	Contro Contro Contro PMSE Mean 1 1 1 1 1 1 6.8 30.4 <b>Rep 2</b>	DI Resp DI Resp DI Resp DI Resp DI Resp DI Resp DI 95% LCL 10.27 20.71 20.71 20.71 20.71 20.71	1 1 16.8 16.8 0.2485 95% UCL 1 1 1 95% UCL 23.33 40.09 Rep 4 1 1 Rep 4	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.47 Min 1 1 1 7 8 Rep 5 1 1 Rep 5	Мах 1 1 35 54 <b>Rep</b> 1 1	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Err Err 86 82	Passes Ac Passes	Cceptability           cceptability </td <td>Criteria Criteria Criteria <b>%Effect</b> 0.0% 0.0% <b>%Effect</b> 0.0% -80.95% <b>Rep 10</b> 1 1</td>	Criteria Criteria Criteria <b>%Effect</b> 0.0% 0.0% <b>%Effect</b> 0.0% -80.95% <b>Rep 10</b> 1 1

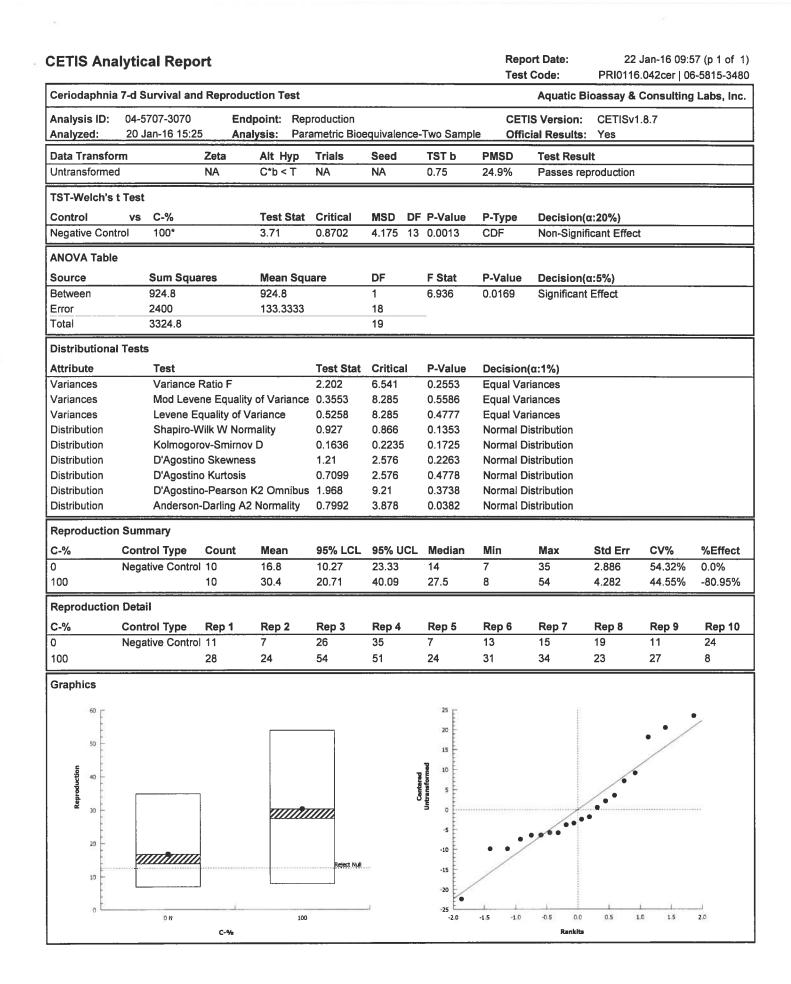
CETIS	Summary	Report
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 Report Date:
 22 Jan-16 09:57 (p 2 of 2)

 Test Code:
 PRI0116.042cer | 06-5815-3480

Ceriodap	hnia 7-d Survival and	Aquatic Bioassay & Consulting Labs, I									
7d Survival Rate Binomials											
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Control	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

Analyst:_____ QA:____



CETIS™ v1.8.7.11

Analyst: _____QA:____

								Test	Code:	FIGULIO	.042081   00	6-5815-34
Ceriod	aphnia 7	-d Survival and	l Reproduc	tion T	est				Aquatic Bi	oassay &	Consulting	, Labs, In
Analys Analyz		09-9583-7677 20 Jan-16 15:25		point: lysis:	7d Survival Rate Linear Interpola		1)		IS Version: cial Results:	CETISv1 Yes	.8.7	
inoar	Internel	ation Options		_								
X Tran	-	Y Transform	See	h	Resamples	Exp 95%	6 CL Met	hod				
Linear		Linear	0		280	Yes		-Point Interp	olation			
Point E	Estimate	s							<u></u>			
Level	%	95% LCL	95% UCL	ти	95% LCL	95% UCL	-					
EC5	>100	N/A	N/A	<1	NA	NA						
EC10	>100	N/A	N/A	<1	NA	NA						
EC15	>100	N/A	N/A	<1	NA	NA						
EC20	>100	N/A	N/A	<1	NA	NA NA						
EC25 EC40	>100 >100	N/A N/A	N/A N/A	<1 <1	NA NA	NA						
EC50	>100	N/A	N/A	<1	NA	NA						
7d Sur	vival Ra	te Summary				Calc	ulated Vari	ate(A/B)				
C-%		ontrol Type	Count	Mear	n Min	Max	Std Err	Std Dev	CV%	%Effect	A	в
0		egative Control	10	1	1	1	0	0	0.0%	0.0%	10	10
100		-	10	1	1	1	0	0	0.0%	0.0%	10	10
7d Sur	vival Ra	te Detail										
C-%	C	ontrol Type	Rep 1	Rep	2 Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	egative Control	1	1	1	1	1	1	1	1	1	1
100			1	1	1	1	1	1	1	1	1	1
7d Sur	vival Ra	te Binomials										
C-%		Control Type	Rep 1	Rep	2 Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0		Negative Control	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
Graphi	ics	đ.										
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Analyst:_____QA:____

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-	-	d Survival and							-	ioassay &		j Labs,
Analysi		0-3354-6189		•	Reproduction				S Version:	CETISv1	.8.7	
Analyze	ed: 2	0 Jan-16 15:2	5 Ana	lysis: l	_inear Interpola	tion (ICPIN)		Offic	ial Results:	Yes		
Linear I	Interpola	tion Options										`
X Trans	sform	Y Transform	See	d I	Resamples	Exp 95%	CL Met	hod				
Linear		Linear	2089	9611 2	280	Yes	Two	-Point Interp	olation			
Point E	stimates			-								
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL						
IC5	>100	N/A	N/A	<1	NA	NA						
IC10	>100	N/A	N/A	<1	NA	NA						
IC15	>100	N/A	N/A	<1	NA	NA						
IC20	>100	N/A	N/A	<1	NA	NA						
IC25	>100	N/A	N/A	<1	NA	NA						
IC40	>100	N/A	N/A	<1	NA	NA						
IC50	>100	N/A	N/A	<1	NA	NA						
Reprod	uction S	ummarv				Cal	culated Va	ariate				
C-%		ntrol Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect		
V"/0												
0		ative Control	10 10	16.8 30.4	7 8	35 54	2.886 4.282	9.126 13.54	54.32% 44.55%	0.0% -80.95%		
0 100	Neg	gative Control	10	16.8	7	35	2.886	9.126	54.32%	0.0%		
0 100 Reprod	Nec luction D	gative Control	10 10	16.8 30.4	7 8	35 54	2.886 4.282	9.126 13.54	54.32% 44.55%	0.0% -80.95%	Pee 0	
0 100 <b>Reprod</b> C-%	Neg luction D Cor	pative Control etail ntrol Type	10 10 <b>Rep 1</b>	16.8 30.4 Rep 2	7 8 Rep 3	35 54 Rep 4	2.886 4.282 Rep 5	9.126 13.54 <b>Rep 6</b>	54.32% 44.55% <b>Rep 7</b>	0.0% -80.95% Rep 8	Rep 9	
0 100 <b>Reprod</b> C-% 0	Neg luction D Cor	gative Control	10 10 <b>Rep 1</b> 11	16.8 30.4 <b>Rep 2</b> 7	7 8 <b>Rep 3</b> 26	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> C-% 0	Neg luction D Cor	pative Control etail ntrol Type	10 10 <b>Rep 1</b>	16.8 30.4 Rep 2	7 8 Rep 3	35 54 Rep 4	2.886 4.282 Rep 5	9.126 13.54 <b>Rep 6</b>	54.32% 44.55% <b>Rep 7</b>	0.0% -80.95% Rep 8		
0 100 <b>Reprod</b> C-%	Neg luction D Cor Neg	pative Control etail ntrol Type	10 10 <b>Rep 1</b> 11	16.8 30.4 <b>Rep 2</b> 7	7 8 <b>Rep 3</b> 26	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> <b>C-%</b> 0 100	Neg luction D Cor Neg	pative Control etail ntrol Type	10 10 <b>Rep 1</b> 11	16.8 30.4 <b>Rep 2</b> 7	7 8 <b>Rep 3</b> 26	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> <b>C-%</b> 0 100	Neg luction D Cor Neg	pative Control etail ntrol Type	10 10 <b>Rep 1</b> 11	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> <b>C-%</b> 0 100	Neg luction D Cor Neg	pative Control etail ntrol Type	10 10 <b>Rep 1</b> 11	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> <b>C-%</b> 0 100	Neg luction D Cor Neg	pative Control etail ntrol Type	10 10 <b>Rep 1</b> 11	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> C-% 0 100 <b>Graphi</b> o	Neg luction D Cor Neg	ative Control etail ntrol Type gative Control	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> 0 100 Graphic	Neg luction D Cor Neg cs 30 25 25	pative Control etail ntrol Type	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> 0 100 Graphic	Neg luction D Cor Neg cs 30 25 25	ative Control etail ntrol Type gative Control	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> C-% 0 100 <b>Graphi</b> o	Neg luction D Cor Neg cs 30 25 25	ative Control etail ntrol Type gative Control	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> 0 100 Graphic	Neg luction D Cor Neg	ative Control etail ntrol Type gative Control	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> 0 100 Graphic	Neg luction D Cor Neg	ative Control etail ntrol Type gative Control	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> 0 100 Graphic	Neg luction D Cor Neg	ative Control etail ntrol Type gative Control	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 <b>Reprod</b> 0 100 Graphic	Neg luction D Cor Neg	ative Control etail ntrol Type gative Control	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	24
0 100 Reprod C-% 0 100 Graphic	Neg luction D Cor Neg	ative Control etail ntrol Type gative Control	10 10 <b>Rep 1</b> 11 28	16.8 30.4 <b>Rep 2</b> 7 24	7 8 <b>Rep 3</b> 26 54	35 54 <b>Rep 4</b> 35	2.886 4.282 <b>Rep 5</b> 7	9.126 13.54 <b>Rep 6</b> 13	54.32% 44.55% <b>Rep 7</b> 15	0.0% -80.95% <b>Rep 8</b> 19	11	

Analyst:_____QA:___P

Ceriodaphnia	7-d Survival and	Reprodu	ction Test					Aquatic Bi	ioassay &	Consulting	g Labs, In
Analysis ID: Analyzed:	06-0097-3081 20 Jan-16 15:25		•	Survival Rat gle 2x2 Con	e tingency Tal	ble		S Version: ial Results:	CETISv ² Yes	1.8.7	
Data Transfor	rm	Zeta	Alt Hyp	Trials	Seed			Test Resu	lt		
Untransformed	d		C > T	NA	NA			Passes 7d	survival ra	ate	
Fisher Exact	Test							·····			
Control	vs C-%		Test Stat	P-Value	P-Type	Decision	(α:5%)				
Negative Cont	trol 100		1	1.0000	Exact	Non-Signi	ificant Effect				
Data Summai	ry					· · · ·					
C-%	Control Type	NR	R	NR + R	Prop NR	Prop R	%Effect				
0	Negative Contr	10	0	10	1	0	0.0%				
100		10	0	10	1	0	0.0%				
7d Survival R	ate Detail										
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 1
0	Negative Control	1	1	1	1	1	1	1	1	1	1
100		1	1	1	1	1	1	1	1	1	1
7d Survival R	ate Binomials										
	ate Binomials Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6		Rep 8	Rep 9	Rep 1
C-%	tate Binomials Control Type Negative Control	<b>Rep 1</b> 1/1	<b>Rep 2</b> 1/1	<b>Rep 3</b> 1/1	<b>Rep 4</b> 1/1	Rep 5	<b>Rep 6</b> 1/1	<b>Rep 7</b> 1/1	<b>Rep 8</b>	<b>Rep 9</b> 1/1	<b>Rep 1</b> 1/1
<b>C-%</b> 0	Control Type					-		Rep 7			
<b>C-%</b> 0 100	Control Type	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	1/1
C-% 0 100 Graphics standard 0.7 0.8 0.8 0.7 0.8 0.8 0.7 0.6 0.6 0.4 0.4 0.3	Control Type Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	<b>Rep 7</b> 1/1	1/1	1/1	

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Analyst:	QA:	J

# CETIS Measurement Report

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PRI0116.042cer | 06-5815-3480

Ceriodaphnia	7-d Survival an	d Rep	roduction Te		Aquat	tic Bioassay &	Consultin	g Labs, Inc.			
Batch ID: Start Date: Ending Date: Duration:	-02-5393-4392 06 Jan-16 14:2 13 Jan-16 14:4 7d 0h		Test Type: Protocol: Species: Source:	Reproduction- EPA/821/R-02 Ceriodaphnia o Aquatic Biosys	-013 (2002) Jubia				Laboratory Wa Not Applicable		
Sample ID:	08-2172-7457		Code:	PRI0116.042c	er			Client:	Pacific Ridgelir	ne, Inc.	
Sample Date:	05 Jan-16 09:2	0	Material:	Sample Water				Project:	Nursery Growe	rs Associa	tion
Receive Date:	06 Jan-16 13:1	2	Source:	Bioassay Repo	ort						
Sample Age:	29h (12.5 °C)		Station:	LAILG-NGA-16	58-8						
Alkalinity (Ca	CO3)-mg/L										
C-%	Control Type	Coun		95% LCL	95% UCL	Min	Мах	Std Er		CV%	QA Count
0	Negative Contr	8	64.13	61.25	67	60	68	1.217	3.441	5.37%	0
100		8	64	64	64	64	64	0	0	0.0%	0
Overall		16	64.06			60	68				0 (0%)
Conductivity-	µmhos										
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	Negative Contr	8	328.4	326	330.8	323	332	1.017	2.875	0.88%	0
100		8	590.3	584.9	595.6	580	597	2.266	6.409	1.09%	0
Overall		16	459.3			323	597				0 (0%)
Dissolved Ox	ygen-mg/L										
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	Negative Contr	8	8.1	7.686	8.514	7.7	9.2	0.1753	0.4957	6.12%	0
100		8	7.75	7.181	8.319	6.3	8.7	0.2405	0.6803	8.78%	0
Overall		16	7.925			6.3	9.2				0 (0%)
Hardness (Ca	CO3)-mg/L										
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	Negative Contr	8	92.13	88.68	95.57	88	97	1.457	4.121	4.47%	0
100		8	184	184	184	184	184	0	0	0.0%	0
Overall		16	138.1			88	184				0 (0%)
pH-Units											
C-%	Control Type	Cour	t Mean	95% LCL	95% UCL	Min	Max	Std Er	r Std Dev	CV%	QA Count
0	Negative Contr	8	8.025	7.803	8.247	7.6	8.3	0.0940	0.2659	3.31%	0
100		8	7.513	7.243	7.782	7.1	7.9	0.1141	0.3227	4.3%	0
Overall		16	7.769			7.1	8.3				0 (0%)
Temperature-	°C										
C-%	Control Type	Cour	it Mean	95% LCL	95% UCL	Min	Max	Std Er	rr Std Dev	CV%	QA Count
0	Negative Contr	8	24.06	23.91	24.21	24	24.5	0.0625		0.73%	0
100		8	24.19	24.02	24.35	24	24.5	0.0692	0.1959	0.81%	0
Overall		16	24.13			24	24.5				0 (0%)

Analyst:_____QA:___

## CETIS Measurement Report

22 Jan-16 09:57 (p 2 of 2)

	vieasurement r	(epoil						st Code:	PRI0116.042cer   06-5815-3480
Ceriodap	hnia 7-d Survival an	d Reprod	luction Tes	it				Aquatic	Bioassay & Consulting Labs, Inc.
Alkalinity	(CaÇO3)-mg/L								· · · · · · · · · · · · · · · · · · ·
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	68	68	68	63	63	63	60	60
100		64	64	64	64	64	64	64	64
Conductiv	vity-µmhos		·						
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	328	332	323	328	330	326	329	331
100		580	596	595	595	597	584	586	589
Dissolved	i Oxygen-mg/L								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	7.8	8.4	7.7	7.8	7.9	7.9	8.1	9.2
100		8.7	8.2	7.7	7.7	7.7	7.9	7.8	6.3
Hardness	(CaCO3)-mg/L								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	97	97	97	90	90	90	88	88
100		184	184	184	184	184	184	184	184
pH-Units									
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	8.1	7.9	7.7	8.3	8.1	8.2	7.6	8.3
100		7.1	7.8	7.9	7.8	7.7	7.2	7.2	7.4
Temperat	ure-°C								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	24	24	24	24	24	24	24.5	24
100		24.3	24	24	24.4	24.1	24.5	24.2	24

ſ QA: Analyst:_



January 27, 2016

Mr. Bryn Home Pacific Ridgeline, Inc. 230 Dove Court Santa Paula, CA 93060



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, Inc.
SAMPLE I.D.:	LAILG-NGA-168-8
DATE RECEIVED:	6 Jan -16
ABC LAB. NO.:	PRI0116.042

## CHRONIC SELENASTRUM ALGAE GROWTH BIOASSAY

NOEC = <100.00 % TUc = >1.00 IC25 = 37.67 % IC50 = 75.35 %

Yours very truly, Scott Johnson Laboratory Director

# , CETIS Summary Report

Selenastrum (	Growth Test							Aquatic I	Bioassay & C	Consulting	j Labs, Inc.
Batch ID: Start Date: Ending Date: Duration:	02-9230-5208 06 Jan-16 15:59 10 Jan-16 14:15 94h	Prot	col:	Cell Growth EPA/821/R-02-( Selenastrum ca Aquatic Biosyst	pricornutum	1		e: Not	oratory Wate Applicable	ər	
•	11-8543-9828 05 Jan-16 09:20		rial:	PRI0116.042se Sample Water			Clie Pro		ific Ridgeline sery Growers		on
Receive Date: Sample Age:	06 Jan-16 13:12 31h (12.5 °C)	Sour Stati		Bioassay Repoi LAILG-NGA-16							
Comparison S	ummary										
Analysis ID	Endpoint		NOEL	LOEL	TOEL	PMSD	TU	Method			
19-6162-9851	Cell Density		<100	100	NA	2.4%	>1	Equal Va	riance t Two-	Sample Te	est
Point Estimate	e Summary										-
Analysis ID	Endpoint		Level	%	95% LCL	95% UCL	TU	Method			
16-0201-1605	Cell Density		IC5	7.535	7.287	7.909	13.27	Linear Int	erpolation (IC	CPIN)	
			IC10	15.07	14.57	15.82	6.636				
			IC15	22.6	21.86	23.73	4.424				
			IC20	30.14	29.15	31.64	3.318				
			IC25	37.67	36.44	39.55	2.654				
			IC40	60.28	58.3	63.27	1.659				
			IC50	75.35	72.87	79.09	1.327				
Test Acceptab	ility										
Analysis ID	Endpoint		Attribu	ute	Test Stat	TAC Limi	ts	Overlap	Decision		
16-0201-1605	Cell Density		Contro	I CV	0.01571	NL - 0.2		Yes	Passes Ac	cceptability	Criteria
19-6162-9851	Cell Density		Contro	I CV	0.01571	NL - 0.2		Yes		cceptability	
16-0201-1605	Cell Density		Contro	l Resp	1.53E+6	1.00E+6 -	NL	Yes	Passes Ac		
19-6162-9851	Cell Density			l Resp	1.53E+6	1.00E+6 -		Yes		cceptability	
19-6162-9851	Cell Density		PMSD		0.02404	0.091 - 0.2	29	Yes	Below Acc	eptability	Criteria
Cell Density S	ummary										
	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	1.5278		1.565E+6	1.496E+6	1.554E+0	5 1.200E+4	2.399E+4	1.57%	0.0%
100		4	5.138E	+5 4.673E+5	5.602E+5	4.930E+5	5.570E+	5 1.460E+4	2.920E+4	5.69%	66.36%
Cell Density D	etail				#3						
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4						
0	Negative Control	1.496E+6	1.526E	+6 1.533E+6	1.554E+6						
100		5.570E+5	5.010E	E+5 4.930E+5	5.040E+5						

Analyst: _____ QA:____A55

Analysis ID:         19-6162-9851 (2.Jar-16.10.30         Endpoint: Analysis         Cell Density Parametric-Two Sample         CETTS Version: Official Result: Untransform         CETTS Version: Cell Sersity           Data Transform         Zata         Att Hyp         Trials         Seed         PMSD         Test Result         Untransform           Litransform         Zata         Att Hyp         Trials         Seed         PMSD         Test Result         Untransform           Litransform         A C > T         NA         NA         2.4%         Fails cell density         Edits cell censity           Equal Variance T Wo-Sample Test         Control         100°         53.63         1.943         36720         6         0.0001         CDF         Significant Effect           ADVA Table         Source         Sum Squares         Mean Square         DF         F Stat         P-Value         Decision(a:5%)           Between         2.064304E+12         1         2875         <0.001         Significant Effect           ADVA Table         Source         Sum Squares         Mean Square         DF P-Value         Decision(a:5%)           Source         Sum Squares         Mean Square         DF P-Value         Decision(a:5%)           Variances         Lower Equality o	Selenastrum	Growth Test							Aquatic Bi	oassay & C	onsulting	g Labs, Ind
Analyzed:         12 Jan-18 10:30         Analysis:         Parametric-Two Sample         Official Results:         Yes           Data Transform         Zeta         Att Hyp         Trials         Sead         PMSD         Test Result	Analysis ID:	19-6162-9851	Endr	point: Cel	Density			CETI	-			
Untransformed         NA         C > T         NA         NA         2.4%         Fails cell density           Equal Variance t Two-Sample Test         Test Stat         Critical         MSD         DF         P-Value         P-Type         Decision(c:5%)           Negative Control         100*         53.83         1.943         36720         6         0.0001         CDF         Significant Effect           ANOVA Table         Source         Sum Squares         Mean Square         DF         F Stat         P-Value         Decision(c:5%)           Between         2.054364E+12         1         2676         <0.0001         Significant Effect           Fror         4285500000         71425000         6          40.0001         Significant Effect           Variances         Variances Ratio F         1.482         47.47         0.7544         Equal Variances           Variances         Mod Levene Equality of Variance 0.02552         13.75         0.6315         Equal Variances           Distribution         Shapiro-Wilk W Normality         0.9504         0.6451         0.7160         Normal Distribution           Distribution         Shapiro-Wilk W Normality         0.9504         0.6451         0.7160         Normal Distribution <th>-</th> <th>12 Jan-16 10:30</th> <th>•</th> <th></th> <th>-</th> <th>Sample</th> <th></th> <th>Offici</th> <th>al Results:</th> <th>Yes</th> <th></th> <th></th>	-	12 Jan-16 10:30	•		-	Sample		Offici	al Results:	Yes		
Equal Variance 1 Two-Sample Test Control vs C-% Test Stat Critical MSD DF P-Value P-Type Decision(ci:5%) Negative Control 100* 53.63 1.943 36720 6 <0.0001 CDF Significant Effect ANOVA Table Source Sum Squares Mean Square DF F Stat P-Value Decision(ci:5%) Segetive Control 1.2054364E+12 1 2.054364E+12 1 2876 <0.0001 Significant Effect Total 2.05836E+12 7 Distributional Tests Attribute Test Test Stat Critical P-Value Decision(ci:1%) Variances Variance Ratio F 1.482 47.47 0.7544 Equal Variances Variances Mod Lavene Equality of Variance 0.2552 13.75 0.6315 Equal Variances Variances Levene Equality of Variance 0.2552 13.75 0.6315 Equal Variances Variances Levene Equality of Variance 0.2552 13.75 0.6315 Equal Variances Users Equality of Variance 0.2552 13.75 0.6315 0.7157 Normal Distribution Distribution Anderson-Darling A2 Normality 0.2698 3.878 0.7060 Normal Distribution Cell Density Summary C-% Control Type Count Mean 95% LCL 95% UCL Median Min Max Std Err CV% %E Control Type Rep 1 Rep 2 Rep 3 Rep 4 C-% Control 1.456E+6 1.554E+6 1.554E+6 1.200E+4 1.57% 0.0 Negative Control 1.456E+6 1.554E+6 1.554E+6 1.200E+4 1.57% 0.0 Negative Control 1.456E+6 1.554E+6 1.554E+6 1.200E+4 5.69% 66. Cell Density Detail C-% Control Type Rep 1 Rep 2 Rep 3 Rep 4 C-% Control Type Rep 1 Rep 2 Rep 3 Rep 4 C-% Control Type Rep 1 Rep 2 Rep 3 Rep 4 C-% Control 1.456E+6 1.554E+6 1.554E+6 100 S.570E+5 5.010E+5 4.930E+5 5.040E+5 Graphics	Data Transfo	m	Zeta	Alt Hyp	Trials	Seed		PMSD	Test Resu	lt		
Control         vs         C-%         Test Stat         Critical         MSD         DF         P-Value         P-Type         Decision(a:5%)           Negative Control         100*         53.63         1.943         35720         6<<0.0001	Untransformed	t	NA	C > T	NA	NA		2.4%	Fails cell d	ensity		
Negative Control         100*         53.63         1.943         36720         6         <0.0001         CDF         Significant Effect           ANOVA Table         Source         Sum Squares         Mean Square         DF         F Stat         P-Value         Decision(q:5%)           Between         2.054364E+12         2.054364E+12         1         2876         <0.0001	Equal Varian	ce t Two-Sample	Test									
ANOVA Table           Source         Sum Squares         Mean Square         DF         F Stat         P-Value         Decision(q:5%)           Between         2.054354E+12         2.054354E+12         1         2876         <0.0001	Control	vs C-%		Test Stat	Critical	MSD DF	P-Value	P-Type	Decision(	a:5%)		
Source         Sum Squares         Mean Square         DF         F Stat         P-Value         Decision(a:5%)           Between         2.054394E+12         1         2876         <0.0001	Negative Cont	rol 100*		53.63	1.943	36720 6	<0.0001		Significant	Effect		
Between         2.054394E+12         2.054394E+12         1         2876         <0.0001         Significant Effect           Croal         2.05595E+12         7           20         Significant Effect           Distributional Tests         Attribute         Test         Test Stat         Critical         P-Value         Decision(α:1%)           Variances         Variance Ratio F         1.482         47.47         0.7544         Equal Variances           Variances         Mod Levene Equality of Variance         0.0252         13.75         0.8715         Equal Variances           Variances         Levene Equality of Variance         0.0252         13.75         0.6315         Equal Variances           Jairibution         Shapiro-Wilk W Normality         0.9504         0.6451         0.7157         Normal Distribution           Distribution         Anderson-Darling A2 Normality         0.2698         3.878         0.7060         Normal Distribution           Distribution         Anderson-Darling A2 Normality         0.269% UCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           Cold         Negative Control 1 4         1.527E+6         1.496E+6         1.564E+6         1.6000	ANOVA Table	)				•••••	f: '			<u></u>		
Between       2.054364E+12       2.054364E+12       1       2876       <0.0001	Source	Sum Squa	res	Mean Squ	lare	DF	F Stat	P-Value	Decision(	a:5%)		
Total         2.05865E+12         7           Distributional Tests         Test         Test Stat         Critical         P-Value         Decision(a:1%)           Variances         Variance Ratio F         1.482         47.47         0.7544         Equal Variances           Variances         Mod Levene Equality of Variance         0.2552         13.75         0.6315         Equal Variances           Variances         Levene Equality of Variance         0.2552         13.75         0.6315         Equal Variances           Distribution         Shapiro-Wilk W Normality         0.9504         0.6451         0.7157         Normal Distribution           Distribution         Addreson-Darling A2 Normality         0.2698         3.878         0.7060         Normal Distribution           Cell Density Summary         C-%         Control Type         Count         Mean         95% LCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           D         Negative Control 4         1.527E+6         1.489E+6         1.506E+6         155000         1.496E+6         1.200E+4         1.57%         0.0           Coll Density Detail         Control Type         Rep 1         Rep 2         Rep 3         Rep 4         <	Between					1	2876	<0.0001				
Distributional Tests           Attribute         Test         Test Stat         Critical         P-Value         Decision(a:1%)           Variances         Variance Ratio F         1.482         47.47         0.7544         Equal Variances           Variances         Mod Levene Equality of Variance         0.001139         13.75         0.6315         Equal Variances           Variances         Levene Equality of Variance         0.2552         13.75         0.6315         Equal Variances           Distribution         Shapiro-Wilk W Normality         0.25694         0.6451         0.7157         Normal Distribution           Distribution         Kolmogorov-Smirnov D         0.1581         0.3313         1.0000         Normal Distribution           Cell Density Summary         C-%         Control Type         Countrol Mean         95% UCL         96% UCL         Median         Min         Max         Std Err         CV%         %E           C-%         Control Type         Countrol 4         1.527E+6         1.489E+6         1.554E+6         1.502000         1.499E+6         1.554E+6         1.200E+4         1.57%         0.0           100         4         5.138E+5         4.673E+5         5.040E+5         5.040E+5         5.040E+5	Error	428550000	00	71425000	0	6			-			
Attribute         Test         Test Stat         Critical         P-Value         Decision(c:1%)           Variances         Variance Ratio F         1.482         47.47         0.7544         Equal Variances           Variances         Mod Levene Equality of Variance         0.2552         13.75         0.8315         Equal Variances           Variances         Levene Equality of Variance         0.2552         13.75         0.6315         Equal Variances           Distribution         Shapiro-Wilk W Normality         0.9504         0.6451         0.7157         Normal Distribution           Distribution         Kolmogorov-Smirinov D         0.1581         0.3313         1.0000         Normal Distribution           Cell Density Summary         Control Type         Count         Mean         95% LCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           C         Control Type         Count         Mean         95% LCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           D         Negative Control 4         1.527E+6         1.489E+6         1.565E+6         1530000         1.496E+6         1.565E+6         5.00E+5         5.00E+5         5.	Fotal	2.05865E+	12			7	-					
Variances         Variance Ratio F         1.482         47.47         0.7544         Equal Variances           Variances         Mod Levene Equality of Variance         0.2552         13.75         0.6315         Equal Variances           Variances         Levene Equality of Variance         0.2552         13.75         0.6315         Equal Variances           Distribution         Shepiro-Wilk W Normality         0.9504         0.6451         0.7157         Normal Distribution           Distribution         Anderson-Darling A2 Normality         0.2698         3.878         0.7060         Normal Distribution           Cell Density Summary         C-%         Control Type         Count         Mean         95% LCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           0         Negative Control 4         1.527E+6         1.489E+6         1.565E+6         150000         1.496E+6         1.200E+4         1.57%         0.0           100         4         5.138E+5         5.602E+5         502500         4.930E+5         5.570E+5         1.460E+4         5.69%         66.           Cell Density Detail         Control Type         Rep 1         Rep 2         Rep 4         0         0.6459 <td< td=""><td>Distributiona</td><td>Tests</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Distributiona	Tests										
Variances       Mod Levene Equality of Variance       0.001139       13.75       0.9742       Equal Variances         Variances       Levene Equality of Variance       0.2552       13.75       0.6315       Equal Variances         Distribution       Shapiro-Wilk W Normality       0.9504       0.6451       0.7157       Normal Distribution         Distribution       Anderson-Darling A2 Normality       0.2698       3.878       0.7060       Normal Distribution         Cell Density Summary       Control Type       Count       Mean       95% LCL       95% UCL       Median       Min       Max       Std Err       CV%       %E         0       Negative Control 4       1.527E+6       1.489E+6       1.565E+6       1530000       1.496E+6       1.554E+6       1.200E+4       1.57%       0.0         100       4       5.138E+5       4.673E+5       5.602E+5       502500       4.930E+5       5.70E+5       1.460E+4       5.69%       66.         Cell Density Detail       Cell       Rep 1       Rep 2       Rep 3       Rep 4       Output       Std Err       CV%       %E         0       Negative Control 1.496E+6       1.52E+6       1.538E+6       1.564E+6       1.526+6       1.526+6       1.526+6 <t< td=""><td>Attribute</td><td>Test</td><td></td><td></td><td>Test Stat</td><td>Critical</td><td>P-Value</td><td>Decision(</td><td>x:1%)</td><td></td><td></td><td></td></t<>	Attribute	Test			Test Stat	Critical	P-Value	Decision(	x:1%)			
Variances         Levene Equality of Variance         0.2552         13.75         0.6315         Equal Variances           Distribution         Shapiro-Wilk W Normality         0.9504         0.6451         0.7157         Normal Distribution           Distribution         Anderson-Darling A2 Normality         0.2598         3.878         0.7060         Normal Distribution           Distribution         Anderson-Darling A2 Normality         0.2598         3.878         0.7060         Normal Distribution           Cell Density Summary         Control Type         Count         Mean         95% LCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           0         Negative Control 4         1.527E+6         1.489E+6         1.565E+6         1530000         1.496E+6         1.524E+6         1.200E+4         1.57%         0.0           100         4         5.138E+5         5.602E+5         502000         4.930E+5         5.570E+5         1.460E+4         5.69%         66:           Cell Density Detail         Control Type         Rep 1         Rep 2         Rep 3         Rep 4         -         -         -         -         -         -         -         -         -         -         -	Variances	Variance I	Ratio F		1.482	47.47	0.7544	Equal Vari	ances			
Distribution Shapiro-Wilk W Normality 0.9504 0.6451 0.7157 Normal Distribution Kolmogorov-Smirnov D 0.1581 0.3313 1.0000 Normal Distribution Distribution Anderson-Darling A2 Normality 0.2698 3.878 0.7060 Normal Distribution Cell Density Summary 2-% Control Type Count Mean 95% LCL 95% UCL Median Min Max Std Err CV% % ED 0.1565 E+6 1.565E+6 1.50000 1.496E+6 1.554E+6 1.200E+4 1.57% 0.0100 4 5.138E+5 4.673E+5 5.602E+5 502500 4.930E+5 5.570E+5 1.460E+4 5.69% 66: 2000 4.930E+5 5.570E+5 1.460E+4 5.69% 66: 2000 2.570E+5 5.010E+5 4.930E+5 5.040E+5 5.570E+5 1.460E+4 5.69% 66: 2000 5.570E+5 5.010E+5 4.930E+5 5.040E+5 5.570E+5 1.460E+4 5.69% 66: 2000 4.930E+5 5.040E+5 2000 4.930E+5 2000 4.93	/ariances	Mod Leve	ne Equality	of Variance	0.001139	13.75	0.9742	Equal Vari	ances			
Distribution         Kolmogorov-Smirnov D         0.1581         0.3313         1.0000         Normal Distribution           Distribution         Anderson-Darling A2 Normality         0.2698         3.878         0.7060         Normal Distribution           Cell Density Summary         Control Type         Count         Mean         95% LCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           Distribution         4         5.138E+5         1.565E+6         1530000         1.496E+6         1.554E+6         1.200E+4         1.57%         0.0           100         4         5.138E+5         5.602E+5         502500         4.930E+5         5.570E+5         1.460E+4         5.69%         66.           Cell Density Detail         Expect Mail         1.526E+6         1.533E+6         1.554E+6         1.500E+4         5.69%         66.           Stripping         1.0000         5.570E+5         5.010E+5         5.040E+5         5.040E+5         5.040E+5         5.040E+5           308000         5.000E+5         5.040E+5	/ariances	Levene Ec	quality of Va	riance	0.2552	13.75	0.6315	Equal Vari	ances			
Distribution         Anderson-Darling A2 Normality         0.2698         3.878         0.7060         Normal Distribution           Cell Density Summary         C-%         Control Type         Count         Mean         95% LCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           0         Negative Control 4         1.527E+6         1.489E+6         1.565E+6         1530000         1.496E+6         1.554E+6         1.20E+4         1.57%         0.0           100         4         5.138E+5         4.673E+5         5.602E+5         502500         4.930E+5         5.570E+5         1.460E+4         5.69%         66.           Cell Density Detail         Control Type         Rep 1         Rep 2         Rep 3         Rep 4         Control Type         S.010E+5         5.040E+5         State	Distribution	Shapiro-W	Vilk W Norm	ality	0.9504	0.6451	0.7157	Normal Dis	stribution			
Cell Density Summary C-% Control Type Count Mean 95% LCL 95% UCL Median Min Max Std Err CV% %E D Negative Control 4 1.527E+6 1.489E+6 1.566E+6 1530000 1.496E+6 1.554E+6 1.200E+4 1.57% 0.0 100 4 5.138E+5 4.673E+5 5.602E+5 502500 4.930E+5 5.570E+5 1.460E+4 5.69% 66. Cell Density Detail C-% Control Type Rep 1 Rep 2 Rep 3 Rep 4 D Negative Control 1.496E+6 1.526E+6 1.534E+6 1.554E+6 100 5.570E+5 5.010E+5 4.930E+5 5.040E+5 Graphics Source 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Distribution	Kolmogor	ov-Smirnov	D	0.1581	0.3313	1.0000	Normal Dis	stribution			
C-%         Control Type         Count         Mean         95% LCL         95% UCL         Median         Min         Max         Std Err         CV%         %E           0         Negative Control 4         1.527E+6         1.489E+6         1.565E+6         1530000         1.496E+6         1.554E+6         1.200E+4         1.57%         0.0           100         4         5.138E+5         4.673E+5         5.02E+5         502500         4.930E+5         5.570E+5         1.460E+4         5.69%         66.           Cell Density Detail           C-%         Control Type         Rep 1         Rep 2         Rep 3         Rep 4         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - </td <td>Distribution</td> <td>Anderson</td> <td>-Darling A2</td> <td>Normality</td> <td>0.2698</td> <td>3.878</td> <td>0.7060</td> <td>Normal Dis</td> <td>stribution</td> <td></td> <td></td> <td></td>	Distribution	Anderson	-Darling A2	Normality	0.2698	3.878	0.7060	Normal Dis	stribution			
0         Negative Control 4         1.527E+6         1.489E+6         1.565E+6         1530000         1.496E+6         1.554E+6         1.200E+4         1.57%         0.0           100         4         5.138E+5         4.673E+5         5.602E+5         502500         4.930E+5         5.570E+5         1.460E+4         5.69%         66.           Cell Density Detail           C-%         Control Type         Rep 1         Rep 2         Rep 3         Rep 4           0         Negative Control 1.496E+6         1.526E+6         1.533E+6         1.554E+6         5.040E+5           100         5.570E+5         5.010E+5         4.930E+5         5.040E+5         5.040E+5           Graphics           Negative Control 1.496E+6         1.526E+6         1.533E+6         1.554E+6           100         5.570E+5         5.010E+5         4.930E+5         5.040E+5           Graphics           Negative Control 1.496E+6         1.640           1000000         1.640         1.640           1000000         1.640         1.640           1000000         1.640         1.640	Cell Density	Summary										
100       4       5.138E+5       4.673E+5       5.02E+5       502500       4.930E+5       5.570E+5       1.460E+4       5.69%       66.         Cell Density Detail         C.%       Control Type       Rep 1       Rep 2       Rep 3       Rep 4         0       Negative Control 1.496E+6       1.526E+6       1.533E+6       1.554E+6         100       5.570E+5       5.010E+5       5.040E+5       5.040E+5         Graphics         Image: Null	C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
Cell Density Detail           C.%         Control Type         Rep 1         Rep 2         Rep 3         Rep 4           0         Negative Control 1.496E+6         1.526E+6         1.533E+6         1.554E+6           100         5.570E+5         5.040E+5         5.040E+5           Graphics	0	Negative Control	4	1.527E+6	1.489E+6	1.565E+6	1530000	1.496E+6	1.554E+6	1.200E+4	1.57%	0.0%
C-%         Control Type         Rep 1         Rep 2         Rep 3         Rep 4           0         Negative Control 1.496E+6         1.526E+6         1.533E+6         1.554E+6           100         5.570E+5         5.010E+5         5.040E+5	100		4	5.138E+5	4.673E+5	5.602E+5	502500	4.930E+5	5.570E+5	1.460E+4	5.69%	66.36%
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100 5.570E+5 5.010E+5 4.930E+5 5.040E+5 Graphics	C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4						
Graphics	0	Negative Control	1.496E+6	1.526E+6	1.533E+6	1.554E+6						
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600000 400000 230000 230000 400000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 2000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 200000 20000 20000 200000 200000 20000 20000 20000 200000 20000 200000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 20000 2000000							t i			/•		
400000 200000 200000 -2.0E+04 -3.0E+04	C00000						0.0E+00		/			
200000 -3.0E+04 -3.0E+04	600000						-1.0E+04					
200000 -3.0E+04	400000						-2.0F+04	./				
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	200000						-3.0E+04	/				
0 -4.0E+04							- F	/ · · · ·				

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CETIS	S Analy	tical Repo	ort					-	rt Date: Code:	13 Jan-16 12:05 (p 1 of PRI0116.042sel   08-4293-803
Selena	strum G	rowth Test							Aquatic Bi	oassay & Consulting Labs, Ind
Analysi		16-0201-1605	End		ell Density			CETI	S Version:	CETISv1.8.7
Analyze	ed:	12 Jan-16 10:30	) Anal	ysis: L	inear Interpola	tion (ICPIN)		Offici	al Results:	Yes
Linear	Interpola	ation Options								
X Trans	sform	Y Transform			esamples	Exp 95% (				
Linear		Linear	0	2	80	Yes	Two-F	Point Interpo	lation	
Point E	Stimates	5							-	
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL				
IC5	7.535	7.287	7.909	13.27	12.64	13.72				
IC10	15.07	14.57	15.82	6.636	6.322	6.861				
IC15	22.6	21.86	23.73	4.424	4.215	4.574				
IC20	30.14	29.15	31.64	3.318	3.161	3.431				
IC25	37.67	36.44	39.55	2.654	2.529	2.745				
IC40 IC50	60.28 75.35	58.3 72.87	63.27 79.09	1.659 1.327	1.58	1.715 1.372				
			79.09	1.327	1.264	- · · · · · · · · · · · · · · · · · · ·				
	ensity Su			-			ulated Var			
C-%		ntrol Type	Count	Mean	Min		Std Err	Std Dev	CV%	%Effect
0 100	Ne	gative Control	4 4	1.527E	-6 1.496E+6 -5 4.930E+5			2.399E+4	1.57%	0.0%
			**	5.150L1	-5 4.930E+5	5.570E+5	1.400274	2.920274	5.65%	66.36%
	ensity De									
C-%		ntrol Type	Rep 1	Rep 2	Rep 3	Rep 4				
0	Ne	gative Control								
100			5.570E+5	5.010E-	-5 4.930E+5	5.040E+5				
Graphi	cs									
	1.6E+06									
	•									
	1.4E+06									
	1.2E+06									
	-									
Cell Density	1.0E+06									
ă T	8.0E+05									
0	6.0E+05									
	0.02403									
	4.0E+05									
	2.0E+05									
	ţ									
	0.0E+00	20	40	60	80 100					

Analyst:_____ QA:____

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CETIS Mea	isurement F	Repo	rt				Report Date: Test Code:			::05 (p 1 of 2) 08-4293-8035	
Selenastrum	Growth Test							Aquati	c Bioassay &	Consultin	g Labs, Inc.
Batch ID:	02-9230-5208		Test Type:	Cell Growth				Analyst:			
Start Date:	06 Jan-16 15:5	9	Protocol:	EPA/821/R-02	-013 (2002)			Diluent: L	aboratory Wa	ter	
Ending Date:	10 Jan-16 14:1	5	Species:	Selenastrum c	apricornutur	n		Brine: N	lot Applicable		
Duration:	94h		Source:	Aquatic Biosys	tems, CO			Age:			
Sample ID:	11-8543-9828		Code:	PRI0116.042s	el			Client: F	acific Ridgelir	ne, Inc.	
Sample Date:	05 Jan-16 09:2	0	Material:	Sample Water				Project: N	lursery Growe	rs Associa	tion
Receive Date:	06 Jan-16 13:1	2	Source:	Bioassay Repo	ort						
Sample Age:	31h (12.5 °C)		Station:	LAILG-NGA-16	68-8						
Alkalinity (Ca	CO3)-mg/L										
C-%	Control Type	Coun		95% LCL	95% UCL		Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr		70			70	70	0	0	0.0%	0
100		1	64			64	64	0	0	0.0%	0
Overall		2	67			64	70				0 (0%)
Conductivity-	µmhos										
C-%	Control Type	Coun		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	5	413	408.8	417.2	410	418	1.517	3.391	0.82%	0
100		5	680.8	676.1	685.5	675	685	1.685	3.768	0.55%	0
Overall		10	546.9			410	685				0 (0%)
Hardness (Ca	CO3)-mg/L										
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	1	100			100	100	0	0	0.0%	0
100		1	184			184	184	0	0	0.0%	0
Overall		2	142			100	184			-	0 (0%)
pH-Units											
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	5	7.68	7.576	7.784	7.6	7.8	0.03742	0.08367	1.09%	0
100		5	7.72	7.032	8.408	7.4	8.7	0.2478	0.5541	7.18%	0
Overall		10	7.7			7.4	8.7				0 (0%)
Temperature-	°C										
C-%	Control Type	Coun		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr		24.2	23.86	24.54	24	24.5	0.1225	0.2739	1.13%	0
100		5	24.2	23.86	24.54	24	24.5	0.1225	0.2739	1.13%	0
Overall		10	24.2			24	24.5				0 (0%)

P Analyst:_____QA:____

CETIS™ v1.8.7.11

CETIS M	leasurement F	Report					Report Date: Test Code:	13 Jan-16 12:05 (p 2 of 2) PRI0116.042sel   08-4293-8035
Selenastru	m Growth Test						Aquatic E	Bioassay & Consulting Labs, Inc.
Alkalinity (	CaCO3)-mg/L							
C-%	Control Type	1						
0 100	Negative Contr	70 64						
Conductivi	ity-µmhos							-
C-%	Control Type	1	2	3	4	5		
0	Negative Contr	410	411	411	415	418		
100		685	681	675	680	683		
Hardness (	(CaCO3)-mg/L							
C-%	Control Type	1						
0	Negative Contr	100					-	
100		184						
pH-Units								
C-%	Control Type	1	2	3	4	5		
0	Negative Contr	7.6	7.7	7.6	7.7	7.8		· · · · · · · · · · · · · · · · · · ·
100		8.7	7.6	7.4	7.4	7.5		
Temperatu	ire-°C							
C-%	Control Type	1	2	3	4	5		
0	Negative Contr	24.5	24.5	24	24	24		·····

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24.5 24.5 24

Analyst: _____ QA: ____

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January 27, 2016

Mr. Bryn Home Pacific Ridgeline, Inc. 230 Dove Court Santa Paula, CA 93060

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, Inc.
SAMPLE I.D.:	LAILG-NGA-64-4
DATE RECEIVED:	6 Jan -16
ABC LAB. NO.:	PRI0116.043

# CHRONIC FATHEAD LARVAE SURVIVAL & GROWTH BIOASSAY

SURVIVAL	NOEC = TUc = EC25 = EC50 =	100.00 % 1.00 >100.00 % >100.00 %
GROWTH	NOEC = TUc = IC25 = IC50 =	100.00 % 1.00 >100.00 % >100.00 %
0		

Yours very truly Scott Johnson Laboratory Director

CETIS Sum	mary Report						Report Date: Test Code:			)8 (p 1 of 2) )-1288-2763
Fathead Minno	ow 7-d Larval Surviva	I and Growt	h Test				Aquatic	Bioassay & (	Consulting	Labs, Inc.
Batch ID: Start Date: Ending Date: Duration:	03-0133-2741 06 Jan-16 14:21 13 Jan-16 14:45 7d 0h	Test Type: Protocol: Species: Source:	Growth-Surviv EPA/821/R-02 Pimephales p Aquatic Biosy	2-013 (2002) romelas				poratory Wate t Applicable	er	
Receive Date:	20-3267-2506 05 Jan-16 08:30 06 Jan-16 13:12 30h (12 °C)	Code: Material: Source: Station:	PRI0116.043f Sample Wate Bioassay Rep LAILG-NGA-6	r ort				cific Ridgeline		on
Comparison S	ummary									
Analysis ID	Endpoint	NOE	LOEL	TOEL	PMSD	τU	Method			
19-7000-5604 08-3675-7225	7d Survival Rate Mean Dry Biomass-m	100 ng 100	>100 >100	NA NA	3.7% 10.8%	1 1		n Rank Sum T ariance t Two	-	
Point Estimate	Summary									
Analysis ID	Endpoint	Leve	%	95% LCL	95% UCL	TU	Method			
01-6612-0313	7d Survival Rate	EC5 EC10	>100 ) >100	N/A N/A	N/A N/A	<1 <1	Linear In	terpolation (I	CPIN)	
		EC15		N/A	N/A	<1				
		EC20		N/A	N/A	<1				
		EC25		N/A	N/A	<1				
9-0658-5027 Mean Dry Biomass-n		EC40		N/A	N/A	<1				
		EC50		N/A	N/A	<1				
09-0658-5027	Mean Dry Biomass-n	•	>100	N/A	N/A	<1	Linear Ir	terpolation (I	CPIN)	
		IC10	>100	N/A	N/A	<1				
		IC15	>100	N/A	N/A	<1				
		1C20	>100	N/A	N/A	<1				
		IC25	>100	N/A	N/A	<1				
		IC40 IC50	>100 >100	N/A N/A	N/A N/A	<1 <1				
Test Acceptab	bility									
Analysis ID	Endpoint	Attri	bute	Test Stat	TAC Lim	its	Overlap	Decision		
01-6612-0313	7d Survival Rate	Cont	rol Resp	1	0.8 - NL		Yes	Passes A	cceptability	Criteria
19-7000-5604	7d Survival Rate	Cont	rol Resp	1	0.8 - NL		Yes	Passes A	cceptability	Criteria
08-3675-7225	Mean Dry Biomass-n	ng Cont	rol Resp	0.3037	0.25 - NL		Yes		cceptability	
09-0658-5027	Mean Dry Biomass-n	ng Cont	rol Resp	0.3037	0.25 - NL		Yes		cceptability	
08-3675-7225	Mean Dry Biomass-r	ng PMS	D	0.1077	0.12 - 0.3		Yes	Below Ac	ceptability	Criteria
7d Survival Ra	ate Summary									
C-%	Control Type Cou					Max		Std Dev	CV%	%Effect
0	Negative Control 4	1	1	1	1	1	0	0	0.0%	0.0%
100	4	0.98	33 0.9303	1	0.9333	1	0.01667	0.03333	3.39%	1.67%
•	mass-mg Summary									<b>.</b>
C-%	Control Type Cou		···			Max		Std Dev	CV%	%Effect
0	Negative Control 4	0.30		0.3326	0.2853	0.32			6.0%	0.0%
100	4	0.31	03 0.2653	0.3554	0.2833	0.34	07 0.01415	0.0283	9.12%	-2.2%
7d Survival R	ate Detail									
C-%	Control Type Rep	o1 Rep	2 Rep 3	Rep 4				_		

0 Negative	Type Rep 1	Rep 2	Rep 3	Rep 4
100	e Control 1	1	1	1
	1	1	1	0.9333

## Mean Dry Biomass-mg Detail

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	
0	Negative Contro	0.2853	0.298	0.3027	0.3287	
100		0.3407	0.328	0.2893	0.2833	

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Analyst: _____ QA: [A35]

# CETIS Summary Report

Report Date:22 JaTest Code:PRI0116.0

22 Jan-16 10:08 (p 2 of 2)
PRI0116.043fml   10-1288-2763

Aquatic Bioassay & Consulting Labs, Inc.

### Fathead Minnow 7-d Larval Survival and Growth Test

7d	Survival	Rate	Binomials

70 Survival Nate Difformats					
C-%	Control Type Rep 1	Rep 2	Rep 3	Rep 4	
0	Negative Control 15/15	15/15	15/15	15/15	
100	15/15	15/15	15/15	14/15	

Analyst: _____QA:____

	alytical Repoi	rt			-		•	ort Date: Code:			08 (p 1 of 3 0-1288-276
Fathead Minr	now 7-d Larval Su	rvival and	Growth Te	st				Aquatic Bi	oassay & (	Consulting	J Labs, Inc
Analysis ID:	19-7000-5604		•	Survival Rate				S Version:	CETISv1.	8.7	
Analyzed:	22 Jan-16 10:07	Ana	lysis: Nor	parametric-				ial Results:			
Data Transfo		Zeta	Alt Hyp	Trials	Seed		PMSD	Test Resu			
Angular (Corr	rected)	NA	C > T	NA	NA		3.7%	Passes /d	survival rat	e	
Wilcoxon Ra	ink Sum Two-Sam	ple Test									
Control	vs C-%		Test Stat	Critical	Ties DF	P-Value	P-Type	Decision(d	1:5%)		
Negative Con	itrol 100		16	NA	1 6	0.5000	Exact	Non-Signifi	cant Effect		
ANOVA Table	e					· · · · · · · · · · · · · · · · · · ·			·		
Source	Sum Squa	res	Mean Squ	lare	DF	F Stat	P-Value	Decision(	1:5%)		
Between	0.00216800		0.0021680		1	1	0.3559	Non-Signif	icant Effect		
Error	0.013008		0.0021680	01	6			_			
Total	0.015176				7						
Distributiona	al Tests				······						
Attribute	Test			Test Stat	Critical	P-Value	Decision	(α:1%)			
Variances	Mod Lever	ne Equality	of Variance	1	13.75	0.3559	Equal Var	iances			
Variances	Levene Eq	uality of V	ariance	9	13.75	0.0240	Equal Var	al Variances			
Distribution	Shapiro-W	/ilk W Nor	nality	0.7065	0.6451	0.0027	Non-norm	al Distributio	n		
Distribution	Kolmogoro	ov-Smirnov	/ D	0.375	0.3313	0.0015	Non-norm	al Distributio	n		
Distribution					3.878	0.0049	Non-norm	al Distribution			
7d Survival I	Rate Summary										
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
		4	1	1	1	1	1	1	0	0.0%	0.0%
0	Negative Control	4		•							
	Negative Control	4	0.9833	0.9303	1	1	0.9333	1	0.01667	3.39%	1.67%
0 100	Negative Control rrected) Transforn	4	0.9833		1	1	0.9333		0.01667	3.39%	1.67%
0 100 Angular (Cor		4	0.9833		· · · · · · · · · · · · · · · · · · ·		0.9333 Min		0.01667 Std Err	3.39% CV%	1.67%
0 100 Angular (Cor	rrected) Transform	4 ned Sumn	0.9833	0.9303				1			
0 100 Angular (Cor C-%	rrected) Transforn Control Type	4 ned Sumn Count	0.9833 nary Mean	0.9303 95% LCL	95% UCL	Median	Min	1 Max	Std Err	CV%	%Effect
0 100 Angular (Con C-% 0	rrected) Transform Control Type Negative Contr	4 ned Sumn Count 4	0.9833 nary Mean 1.441	0.9303 95% LCL 1.441	95% UCL 1.442	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect
0 100 <b>Angular (Con</b> <b>C-%</b> 0 100	rrected) Transform Control Type Negative Contr	4 ned Sumn Count 4	0.9833 nary Mean 1.441	0.9303 95% LCL 1.441	95% UCL 1.442	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect 0.0%
0 100 Angular (Con C-% 0 100 7d Survival I	rrected) Transform Control Type Negative Contr Rate Detail	4 ned Sumn Count 4 4 Rep 1	0.9833 mary Mean 1.441 1.408	0.9303 95% LCL 1.441 1.304	<b>95% UCL</b> 1.442 1.513	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect 0.0%
0 100 <b>Angular (Con</b> <b>C-%</b> 0 100 <b>7d Survival I</b> C-%	rrected) Transforn Control Type Negative Contr Rate Detail Control Type	4 ned Sumn Count 4 4 Rep 1	0.9833 <b>Mean</b> 1.441 1.408 <b>Rep 2</b>	0.9303 95% LCL 1.441 1.304 Rep 3	95% UCL 1.442 1.513 Rep 4	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect
0 100 <b>Angular (Con</b> <b>C-%</b> 0 <b>7d Survival I</b> C-% 0 100	rrected) Transforn Control Type Negative Contr Rate Detail Control Type	4 ned Sumn Count 4 4 8 Rep 1 1 1	0.9833 mary Mean 1.441 1.408 Rep 2 1 1	0.9303 95% LCL 1.441 1.304 Rep 3 1	<b>95% UCL</b> 1.442 1.513 <b>Rep 4</b> 1	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect
0 100 <b>Angular (Con</b> <b>C-%</b> 0 <b>7d Survival I</b> C-% 0 100	rrected) Transform Control Type Negative Contr Rate Detail Control Type Negative Control	4 ned Sumn Count 4 4 8 Rep 1 1 1	0.9833 mary Mean 1.441 1.408 Rep 2 1 1	0.9303 95% LCL 1.441 1.304 Rep 3 1	<b>95% UCL</b> 1.442 1.513 <b>Rep 4</b> 1	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect
0 100 Angular (Con C-% 0 100 7d Survival I C-% 0 100 Angular (Con	rrected) Transform Control Type Negative Contr Rate Detail Control Type Negative Control rrected) Transform	4 ned Sumn Count 4 4 8 Rep 1 1 1 1 ned Detail Rep 1	0.9833 mary Mean 1.441 1.408 Rep 2 1 1	0.9303 95% LCL 1.441 1.304 Rep 3 1 1	<b>95% UCL</b> 1.442 1.513 <b>Rep 4</b> 1 0.9333	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect
0 100 Angular (Con C-% 0 100 7d Survival I C-% 0 100 Angular (Con C-%	rrected) Transform Control Type Negative Contr Rate Detail Control Type Negative Control rrected) Transform Control Type	4 ned Sumn Count 4 4 8 Rep 1 1 1 1 ned Detail Rep 1	0.9833 mary Mean 1.441 1.408 Rep 2 1 1 Rep 2	0.9303 95% LCL 1.441 1.304 Rep 3 1 1 Rep 3	95% UCL 1.442 1.513 Rep 4 1 0.9333 Rep 4	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect
0 100 Angular (Cor C-% 0 100 7d Survival I C-% 0 100 Angular (Cor C-% 0 100	rrected) Transform Control Type Negative Contr Rate Detail Control Type Negative Control rrected) Transform Control Type Negative Control	4 ned Sumn Count 4 4 4 8 Rep 1 1 1 1 ned Detail Rep 1 1.441	0.9833 mary Mean 1.441 1.408 Rep 2 1 1 Rep 2 1.441	0.9303 95% LCL 1.441 1.304 Rep 3 1 1 1 Rep 3 1.441	95% UCL 1.442 1.513 Rep 4 1 0.9333 Rep 4 1.441	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect 0.0%
0 100 Angular (Con C-% 0 100 7d Survival I C-% 0 100 C-% 0 100 7d Survival I 7d Survival I	rrected) Transform Control Type Negative Contr Rate Detail Control Type Negative Control rrected) Transform Control Type Negative Control Rate Binomials	4 ned Sumn Count 4 4 4 1 1 1 1 ned Detail Rep 1 1.441 1.441	0.9833 mary Mean 1.441 1.408 Rep 2 1 1 1 Rep 2 1.441 1.441 1.441	0.9303 95% LCL 1.441 1.304 Rep 3 1 1 Rep 3 1.441 1.441 1.441	95% UCL 1.442 1.513 Rep 4 1 0.9333 Rep 4 1.441 1.31	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect 0.0%
0 100 Angular (Con C-% 0 100 7d Survival I C-% 0 100 Angular (Con C-% 0 100	rrected) Transform Control Type Negative Contr Rate Detail Control Type Negative Control rrected) Transform Control Type Negative Control	4 ned Sumn Count 4 4 7 1 1 1 1 1 1 1 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 1 4 4 1 1 1 1 1 1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.9833 mary Mean 1.441 1.408 Rep 2 1 1 Rep 2 1.441	0.9303 95% LCL 1.441 1.304 Rep 3 1 1 1 Rep 3 1.441	95% UCL 1.442 1.513 Rep 4 1 0.9333 Rep 4 1.441	Median 1.441	<b>Min</b> 1.441	1 <b>Max</b> 1.441	Std Err 0	<b>CV%</b> 0.0%	%Effect

Analyst:_____QA:____

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CETIS Ana	lytical Report					Report Date: Test Code:	22 Jan-16 10 PRI0116.043fml				
Fathead Minn	ow 7-d Larval Survi	val and Growt	h Test			Aquatic Bioassay & Consulting Labs, Inc					
Analysis ID: Analyzed:	19-7000-5604 22 Jan-16 10:07	Endpoint: Analysis:	7d Survival Rate Nonparametric-Two Sa	Imple		CETIS Version Official Result					
Graphics											
0.9	٠				0.04		• •	•			
0.8 10 10 10 10 10 10 10 10 10 10 10 10 10				aige	0.00	•••	•				
7d Survival Rate				Cantared Corr. Angle	-0.04						
0.4					-0.06						
0.2					-0.10						
0.0	0 N	C-%	100		-0.12	-1.0 -0.5 0 Ranki		1.5			

CETIS Ana	lytical Repo	rt					•	ort Date: Code:			08 (p 3 of 3 0-1288-276
Fathead Minn	ow 7-d Larval Su	rvival and	Growth Tes	it				Aquatic B	ioassay & C	Consulting	g Labs, Inc
Analysis ID:	08-3675-7225		•	n Dry Biom				S Version:	CETISv1.	8.7	
Analyzed:	22 Jan-16 10:07	Ana	lysis: Para	metric-Two	Sample		Offic	ial Results:	Yes		
Data Transfor	m	Zeta	Alt Hyp	Trials	Seed		PMSD	Test Resu	ılt		
Untransformed	1	NA	C > T	NA	NA		10.8%	Passes m	ean dry bion	nass-mg	
Equal Varianc	e t Two-Sample	Test									
Control	vs C-%		Test Stat	Critical	MSD DF	P-Value	P-Type	Decision(	α:5%)		
Negative Cont	rol 100		-0.3963	1.943	0.033 6	0.6472	CDF	Non-Signi	ficant Effect		
ANOVA Table		• • • • •									
Source	Sum Squa	res	Mean Squ	are	DF	F Stat	P-Value	Decision(	a:5%)		
Between	8.888931E		8.888931E	-	1	0.157	0.7056		ficant Effect		
Error	0.0033964	45	0.0005660	742	6			÷			
Total	0.0034853	34			7						
Distributional	Tests					· · ·					
Attribute	Test			Test Stat	Critical	P-Value	Decision	α:1%)			
Variances	Variance I	Ratio F		2.416	47.47	0.4877	Equal Var	iances			
Variances	Mod Leve	ne Equality	of Variance	3.021	13.75	0.1329	Equal Var	iances			
Variances	Levene Ed	quality of V	ariance	3.395	13.75	0.1150	Equal Var	iances			
Distribution		/ilk W Norn		0.917	0.6451	0.4059	Normal D	stribution			
Distribution	Kolmogor	ov-Smirnov	D	0.1724	0.3313	0.8884	Normal D	stribution			
Distribution	Anderson	Darling A2	Normality	0.3438	3.878	0.4920	Normal D	stribution			
Mean Dry Bio	mass-mg Summ	ary									
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	0.3037	0.2747	0.3326	0.3003	0.2853	0.3287	0.009102	6.0%	0.0%
100		4	0.3103	0.2653	0.3554	0.3087	0.2833	0.3407	0.01415	9.12%	-2.2%
Mean Dry Bio	mass-mg Detail										
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4						÷
0	Negative Control	0.2853	0.298	0.3027	0.3287						
100		0.3407	0.328	0.2893	0.2833						
Graphics											
0.35		1	[ · · · · · · · · · · · · · · · · · · ·			0,04					
0.30		-				0.03				/	•
£		_ 		Reject Null	227	Ē				•	
0.25				The part in the		0.02			• 5		
Bion						nafor					
Wean Dry Blomass-					8						
E 0.15						0.00			<u>_</u>		
0.13						-					
0.10						-0.01					
Ē						-	/				
0.05						-0.02	6	•			
-					9		1				
0.00	0 N		100			-0.03 -1.5	-1.0	-0.5 0.0	0.5	1.0	1.5
	U N										

CETIS	Analy	tical Repo	rt					-	rt Date: Code:			:08 (p 1 of 10-1288-276
Fathea	d Minno	w 7-d Larval Su	rvival and	Growt	h Test				Aquatic Bi	oassay & (	Consultin	g Labs, Ind
Analysi	s ID:	01-6612-0313	End	point:	7d Survival Rat	e		CETI	S Version:	CETISv1	.8.7	
Analyze		22 Jan-16 10:07		ysis:	Linear Interpola	tion (ICPIN)		Offic	ial Results:	Yes		
Linear	Interpola	ation Options										
X Trans	sform	Y Transform	See	d	Resamples	Exp 95% C	L Meth	od				
Linear		Linear	0		280	Yes	Two-	Point Interpo	olation			
Point E	stimate	6								×		
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL						
EC5	>100	N/A	N/A	<1	NA	NA						
EC10	>100	N/A	N/A	<1	NA	NA						
EC15	>100	N/A	N/A	<1	NA	NA						
EC20	>100	N/A	N/A	<1	NA	NA						
EC25	>100	N/A	N/A	<1	NA	NA						
EC40	>100	N/A	N/A	<1	NA	NA						
EC50	>100	N/A	N/A	<1	NA	NA						
7d Sur	vival Rat	te Summary				Calcula	ted Varia	te(A/B)				
C-%		ontrol Type	Count	Mear			Std Err	Std Dev	CV%	%Effect	Α	В
0	Ne	gative Control	4	1	1	•	0	0	0.0%	0.0%	60	60
100			4	0.983	3 0.9333	1	0.01667	0.03333	3.39%	1.67%	59	60
7d Sur	vival Ra	te Detail										
C-%		ontrol Type	Rep 1	Rep		Rep 4						
0	Ne	egative Control	1	1	1	1						
100			1	1	1	0.9333						
7d Sur	vival Ra	te Binomials										
C-%	C	Control Type	Rep 1	Rep	2 Rep 3	Rep 4						
0	1	Negative Control	15/15	15/15	5 15/15	15/15						
100			15/15	15/15	5 15/15	14/15						
Graphi	cs											······································
	1.0				•							
	0.9											
	0.8											
	0.7											
1												
	0.5											
r	0.4											
	0.3											
	0.2											
	0.1											
	0.0 t	<u> </u>		<u> </u>								
	٥	20	40	60	80 100							

		ytical Repo						Test	Code:	PRI0116.043fml   10-1288-27
Fathea	d Minno	ow 7-d Larval S	urvival and	Growt	h Test					oassay & Consulting Labs, In
Analysi	is ID:	09-0658-5027	End	point:	Mean Dry Biom	lass-mg		CETI	S Version:	CETISv1.8.7
Analyz		22 Jan-16 10:0		lysis:	Linear Interpola				ial Results:	Yes
Linear	Interpo	lation Options								
X Trans	sform	Y Transform	see	d	Resamples	Exp 95% C	L Meth	od		
Linear		Linear	184	0059	280	Yes	Two-	Point Interpo	olation	
Point E	Estimate	s								
Level	%	95% LCL	95% UCL	τu	95% LCL	95% UCL				
IC5	>100	N/A	N/A	<1	NA	NA				
IC10	>100	N/A	N/A	<1	NA	NA				
IC15	>100	N/A	N/A	<1	NA	NA				
IC20	>100	N/A	N/A	<1	NA	NA				
IC25	>100	N/A	N/A	<1	NA	NA				
IC40	>100	N/A	N/A	<1	NA	NA				
IC50	>100	N/A	N/A	<1	NA	NA				
Mean D	Dry Bior	mass-mg Summ	nary			Calci	lated Va	riate		
C-%	C	ontrol Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	egative Control	4	0.303	7 0.2853	0.3287	0.009102	0.0182	6.0%	0.0%
100		•	4	0.310	3 0.2833	0.3407	0.01415	0.0283	9.12%	-2.2%
Mean [	Dry Bior	nass-mg Detail								······································
C-%	С	ontrol Type	Rep 1	Rep 2	2 Rep 3	Rep 4				
0	N	egative Control	0.2853	0.298	0.3027	0.3287				
100		•	0.3407	0.328		0.2833				
Graphi	ics									
Grapm										
	0.35									
	0.30									
	Ē									
	0.25									
1										
1	<b>6</b> 0.20				92.					
	0.15									
3										
	0.10									
	L.									
	0.05									
	-									
	0.00	<u> </u>	Landa and the state of the stat							

Analyst:_____QA:____

CETIS Mea	surement F	Repor	t		Report Date Test Code:			08 (p 1 of 2) 0-1288-2763				
Fathead Minne	ow 7-d Larval S	urvival	and Growt	h Test				Aqua	atic Bioassay &	& Consulting	g Labs, Inc.	
Batch ID: Start Date: Ending Date: Duration:	03-0133-2741 06 Jan-16 14:2 13 Jan-16 14:4 7d 0h	1	Test Type: Protocol: Species: Source:	Growth-Surviva EPA/821/R-02 Pimephales pr Aquatic Biosys	-013 (2002) omelas			Analyst: Diluent: Brine: Age:	Laboratory Water Not Applicable			
Sample ID:	20-3267-2506		Code:	PRI0116.043fr	PRI0116.043fml			Client:	Pacific Ridgel	ine, Inc.		
Sample Date:	05 Jan-16 08:3	0	Material:						Nursery Grow	ers Associat	ion	
<b>Receive Date:</b>	06 Jan-16 13:1	2	Source:	Bioassay Report								
Sample Age:	30h (12 °C)		Station:	LAILG-NGA-64	1-4							
Alkalinity (Ca	CO3)-mg/L											
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count	
0	Negative Contr	8	64.88	62.71	67.04	63	68	0.914	9 2.588	3.99%	0	
100		8	48	48	48	48	48	0	0	0.0%	0	
Overall		16	56.44			48	68				0 (0%)	
Conductivity-	umhos											
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std E	irr Std Dev	CV%	QA Count	
0	Negative Contr	8	328.4	326	330.8	323	332	1.017	2.875	0.88%	0	
100		8	150.5	146.6	154.4	142	157	1.669	4.721	3.14%	0	
Overall		16	239.4			142	332				0 (0%)	
Dissolved Oxy	ygen-mg/L											
C-%	Control Type	Count	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count	
0	Negative Contr	8	8.1	7.686	8.514	7.7	9.2	0.175	3 0.4957	6.12%	0	
100		8	6.538	5.68	7.395	5.5	8.6	0.362	5 1.025	15.68%	0	
Overall		16	7.319			5.5	9.2				0 (0%)	
Hardness (Ca	CO3)-mg/L											
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std E	rr Std Dev	CV%	QA Count	
0	Negative Contr	8	92.63	89.6	95.65	90	97	1.281	3.623	3.91%	0	
100		8	115	115	115	115	115	0	0	0.0%	0	
Overall		16	103.8			90	115				0 (0%)	
pH-Units												
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Мах	Std E	Frr Std Dev	CV%	QA Count	
0	Negative Contr	8	8.025	7.803	8.247	7.6	8.3	0.094	02 0.2659	3.31%	0	
100		8	7.788	7.585	7.99	7.5	8.1	0.085	644 0.2416	3.1%	0	
Overall		16	7.906			7.5	8.3				0 (0%)	
Temperature-	°C											
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std E	Err Std Dev	CV%	QA Count	
0	Negative Contr	8	24.13	23.93	24.32	24	24.5	0.081	83 0.2315	0.96%	0	
100	-	8	24.17	23.97	24.36	24	24.5	0.082	0.2344	0.97%	0	
Overall		16	24.15			24	24.5				0 (0%)	

Analyst:_____QA:___

# CETIS Measurement Report

Fathead Minnow 7-d Larval Survival and Growth Test

24.32

24

24

100

Alkalinity	(CaCO3)-mg/L									
C-%	Control Type	1	2	3	4	5	6	7	8	
0	Negative Contr	68	68	68	63	63	63	63	63	
100		48	48	48	48	48	48	48	48	
Conductiv	vity-µmhos									
C-%	Control Type	1	2	3	4	5	6	7	8	
0	Negative Contr	328	332	323	328	330	326	329	331	
100		142	147	153	155	150	157	151	149	
Dissolved	i Oxygen-mg/L									
C-%	Control Type	1	2	3	4	5	6	7	8	
0	Negative Contr	7.8	8.4	7.7	7.8	7.9	7.9	8.1	9.2	
100		8.6	5.6	6.1	6.2	7	7.2	6.1	5.5	
Hardness	(CaCO3)-mg/L									
C-%	Control Type	1	2	3	4	5	6	7	8	
0	Negative Contr	97	97	97	90	90	90	90	90	
100		115	115	115	115	115	115	115	115	
pH-Units								Ī		
C-%	Control Type	1	2	3	4	5	6	7	8	
0	Negative Contr	8.1	7.9	7.7	8.3	8.1	8.2	7.6	8.3	
100		7.7	7.7	8.1	8.1	8	7.5	7.6	7.6	
Temperat	ture-°C									
C-%	Control Type	1	2	3	4	5	6	7	8	
0	Negative Contr	24	24	24	24.5	24	24	24.5	24	

24.5

24

24.5

24

24

# Test Code: PRI0116.043fml | 10-1288-2763

Report Date:

Aquatic Bioassay & Consulting Labs, Inc.

22 Jan-16 10:08 (p 2 of 2)

Analyst:_____ QA:____



January 27, 2016

Mr. Bryn Home Pacific Ridgeline, Inc. 230 Dove Court Santa Paula, CA 93060

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, Inc.
SAMPLE I.D.:	LAILG-NGA-64-4
DATE RECEIVED:	6 Jan -16
ABC LAB. NO.:	PRI0116.043

### **CHRONIC CERIODAPHNIA SURVIVAL & REPRODUCTION BIOASSAY**

SURVIVAL	NOEC = TUc = EC25 = EC50 =	100.00 % 1.00 >100.00 % >100.00 %
REPRODUCTION	NOEC = TUc = IC25 = IC50 =	100.00 % 1.00 >100.00 % >100.00 %
Yours year truly		

y ours Scott Johr Laboratory Director

# **CETIS Summary Report**

Ceriodaphnia	7-d Survival and	Reprodu	iction Te	est				Aquatic	Bioassay & C	Consulting	Labs, Inc.
Batch ID:	05-1344-8268	Tes	st Type:	Reproduction-	Survival (7d)		A	nalyst:			
Start Date:	06 Jan-16 14:21		tocol:	EPA/821/R-02					boratory Wate	er	
Ending Date:	13 Jan-16 14:45		ecies:	Ceriodaphnia			в	rine: No	t Applicable		
Duration:	7d Oh	•	urce:	Aquatic Biosys			Α	ge:			
Sample ID:	06-6107-0593	Co	de:	PRI0116.043c	er		С	lient: Pa	cific Ridgeline	e, Inc.	
•	05 Jan-16 08:30		terial:	Sample Water			Р		Irsery Growers		n
-	06 Jan-16 13:12		urce:	Bioassay Rep				•	-		
Sample Age:	30h (12 °C)		tion:	LAILG-NGA-6							
Comparison S	Summary										
Analysis ID	Endpoint		NOEL	LOEL	TOEL	PMSD	ти	Method			
07-8564-8908	7d Survival Rate		100	>100	NA	NA	1	Fisher E	xact Test		
00-4293-7593	Reproduction		100	>100	NA	23.8%	1	TST-We	elch's t Test		
Point Estimate	e Summary										
Analysis ID	Endpoint		Leve	%	95% LCL	95% UCL	τu	Method			
05-7279-8684	7d Survival Rate	1	EC5	>100	N/A	N/A	<1	Linear II	nterpolation (I	CPIN)	
			EC10	>100	N/A	N/A	<1				
			EC15		N/A	N/A	<1				
			EC20		N/A	N/A	<1				
			EC25	>100	N/A	N/A	<1				
			EC40	>100	N/A	N/A	<1				
			EC50	) >100	N/A	N/A	<1				
01-7945-0681	Reproduction		IC5	>100	N/A	N/A	<1	Linear I	nterpolation (I	CPIN)	
			IC10	>100	N/A	N/A	<1				
			IC15	>100	N/A	N/A	<1				
			IC20	>100	N/A	N/A	<1				
			IC25	>100	N/A	N/A	<1				
			IC40	>100	N/A	N/A	<1				
			IC50	>100	N/A	N/A	<1				
Test Acceptat	bility										
			A 4415		T	TAC Lim	ite	Overlap	Decision		
Anaivsis ID	Endpoint		Attrii	oute	lest Stat	INC LIII					
	Endpoint 7d Survival Rate			•	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.8 - NL		Yes	Passes A	cceptability	Criteria
05-7279-8684	7d Survival Rate	-	Cont	rol Resp				Yes Yes		cceptability cceptability	
Analysis ID 05-7279-8684 07-8564-8908 00-4293-7593	7d Survival Rate 7d Survival Rate	-	Cont Cont	rol Resp rol Resp	1	0.8 - NL 0.8 - NL			Passes A	cceptability	Criteria
05-7279-8684 07-8564-8908 00-4293-7593	7d Survival Rate 7d Survival Rate Reproduction	-	Cont Cont Cont	rol Resp rol Resp rol Resp	1 1 16.8	0.8 - NL 0.8 - NL 15 - NL		Yes Yes	Passes A Passes A	cceptability cceptability	Criteria Criteria
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681	7d Survival Rate 7d Survival Rate	-	Cont Cont Cont	rol Resp rol Resp rol Resp rol Resp	1	0.8 - NL 0.8 - NL		Yes	Passes A Passes A Passes A	cceptability	Criteria Criteria Criteria
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction	-	Contr Contr Contr Contr	rol Resp rol Resp rol Resp rol Resp	1 1 16.8 16.8	0.8 - NL 0.8 - NL 15 - NL 15 - NL		Yes Yes Yes	Passes A Passes A Passes A	cceptability cceptability cceptability	Criteria Criteria Criteria
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R	7d Survival Rate 7d Survival Rate Reproduction Reproduction	-	Contr Contr Contr Contr	rol Resp rol Resp rol Resp rol Resp D	1 1 16.8 16.8 0.2384	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4		Yes Yes Yes	Passes A Passes A Passes A Passes A	cceptability cceptability cceptability	Criteria Criteria Criteria Criteria
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-%	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction	Count	Contr Contr Contr PMS	rol Resp rol Resp rol Resp rol Resp D	1 1 16.8 16.8 0.2384	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4	7	Yes Yes Yes Yes	Passes A Passes A Passes A Passes A	cceptability cceptability cceptability cceptability	Criteria Criteria Criteria Criteria
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-% 0	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction ate Summary Control Type	Count	Conti Conti Conti PMS Mear	rol Resp rol Resp rol Resp D D 95% LC	1 16.8 16.8 0.2384 _ <b>95% UCL</b>	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4 Min	7 Max	Yes Yes Yes Yes	Passes A Passes A Passes A Passes A Std Dev	cceptability cceptability cceptability cceptability CV%	Criteria Criteria Criteria Criteria <b>%Effect</b>
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-% 0 100	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction <b>ate Summary</b> Control Type Negative Control	Count 10	Contr Contr Contr PMS Mear	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1	1 16.8 16.8 0.2384 - <b>95% UCL</b> 1	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4 Min 1	7 <u>Max</u> 1	Yes Yes Yes Std Err 0	Passes A Passes A Passes A Passes A Std Dev 0	cceptability cceptability cceptability cceptability cceptability CV% 0.0%	Criteria Criteria Criteria Criteria <b>%Effect</b> 0.0%
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction <b>ate Summary</b> Control Type Negative Control	Count 10	Contr Contr Contr PMS Mear	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1	1 16.8 16.8 0.2384 _ <b>95% UCL</b> 1 1	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4 Min 1 1	7 <u>Max</u> 1	Yes Yes Yes Std Err 0	Passes A Passes A Passes A Passes A Std Dev 0 0	cceptability cceptability cceptability cceptability cceptability CV% 0.0%	Criteria Criteria Criteria Criteria <b>%Effect</b> 0.0%
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-% 0 100 Reproduction C-%	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction ate Summary Control Type Negative Control	Count 10 10 Count	Conti Conti Conti PMS Mean 1	rol Resp rol Resp rol Resp D D 95% LC 1 1	1 16.8 16.8 0.2384 _ <b>95% UCL</b> 1 1	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4 Min 1 1	7 <u>Max</u> 1 1	Yes Yes Yes Std Err 0 0	Passes A Passes A Passes A Passes A Std Dev 0 0	cceptability cceptability cceptability cceptability cceptability CV% 0.0% 0.0%	Criteria Criteria Criteria Criteria <b>%Effec</b> 0.0% 0.0%
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-% 0 100 Reproduction C-% 0	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction ate Summary Control Type Negative Control	Count 10 10 Count	Contr Contr Contr PMS Mean 1 1	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1	1 16.8 16.8 0.2384 - 95% UCL 1 1 95% UCL	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4 Min 1 1 Min	7 1 1 Max	Yes Yes Yes Std Err 0 0 Std Err	Passes A Passes A Passes A Std Dev 0 0 Std Dev	cceptability cceptability cceptability cceptability cceptability CV% 0.0% 0.0% CV%	Criteria Criteria Criteria Criteria %Effec 0.0% 0.0% %Effec
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 <b>7d Survival R</b> C-% 0 100 <b>Reproduction</b> C-% 0 100	7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control	Count 10 10 Count 10	Contr Contr Contr PMS Mear 1 1 1 Mear 16.8	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1 1	1 1 16.8 16.8 0.2384 <b>95% UCL</b> 1 1 <b>95% UCL</b> 23.33	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4 Min 1 1 7	7 1 1 1 <u>Max</u> 35	Yes Yes Yes Std Err 0 0 Std Err 2.886	Passes A Passes A Passes A Passes A Std Dev 0 0 0 Std Dev 9.126	cceptability cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% 0.0% 0.0% 54.32%	Criteria Criteria Criteria Criteria %Effec 0.0% 0.0% %Effec 0.0%
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-% 0 100 Reproduction C-% 0 100 7d Survival R	7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control	Count 10 10 Count 10	Contr Contr Contr PMS Mear 1 1 1 Mear 16.8	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1 1 <u>95% LC</u> 10.27 20.01	1 1 16.8 16.8 0.2384 <b>95% UCL</b> 1 1 23.33 38.39 <b>Rep 4</b>	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.4 Min 1 1 Min 7 15 Rep 5	7 1 1 35 51 Rep 6	Yes Yes Yes Std Err 0 0 0 Std Err 2.886 4.063	Passes A Passes A Passes A Std Dev 0 0 0 Std Dev 9.126 12.85 Rep 8	cceptability cceptability cceptability cceptability CV% 0.0% 0.0% 0.0% 0.0% 54.32% 44.0% Rep 9	Criteria Criteria Criteria <b>%Effec</b> 0.0% 0.0% <b>%Effec</b> 0.0% -73.81% <b>Rep 10</b>
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-% 0 100 Reproduction C-% 0 100 7d Survival R C-%	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction Control Type Negative Control Summary Control Type Negative Control	Count 10 10 10 Count 10 10 Rep 1	Contr Contr Contr PMS Mear 1 1 1 Mear 16.8 29.2	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1 1 <u>95% LC</u> 10.27 20.01	1 1 16.8 16.8 0.2384 <b>95% UCL</b> 1 1 <b>95% UCL</b> 23.33 38.39	0.8 - NL 0.8 - NL 15 - NL 15 - NL 0.13 - 0.4' Min 1 1 7 15	7 1 1 1 <u>Max</u> 35 51	Yes Yes Yes <b>Std Err</b> 0 0 0 <b>Std Err</b> 2.886 4.063	Passes A Passes A Passes A Std Dev 0 0 0 Std Dev 9.126 12.85	cceptability cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% 0.0% 54.32% 44.0%	Criteria Criteria Criteria Criteria %Effec 0.0% 0.0% %Effec 0.0% -73.81%
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 <b>7d Survival R</b> C-% 0 100 <b>Reproduction</b> C-% 0 100 <b>7d Survival R</b> C-% 0	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction Control Type Negative Control Summary Control Type Negative Control Reproduction	Count 10 10 10 Count 10 10 Rep 1	Contr Contr Contr PMS Mear 1 1 1 Mear 16.8 29.2 Rep	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1 1 0.27 20.01 <b>2 Rep 3</b>	1 1 16.8 16.8 0.2384 <b>95% UCL</b> 1 1 23.33 38.39 <b>Rep 4</b>	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.4 Min 1 1 Min 7 15 Rep 5	7 1 1 35 51 Rep 6	Yes Yes Yes <b>Std Err</b> 0 0 0 <b>Std Err</b> 2.886 4.063	Passes A Passes A Passes A Std Dev 0 0 0 Std Dev 9.126 12.85 Rep 8	cceptability cceptability cceptability cceptability CV% 0.0% 0.0% 0.0% 0.0% 54.32% 44.0% Rep 9	Criteria Criteria Criteria <b>%Effec</b> 0.0% 0.0% <b>%Effec</b> 0.0% -73.81% <b>Rep 10</b>
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-% 0 100 Reproduction C-% 0 100 7d Survival R C-% 0 100	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction Control Type Negative Control Summary Control Type Negative Control Reproduction Control Type Negative Control Reproduction Negative Control	Count 10 10 10 10 10 10 Rep 1 1	Contr Contr Contr PMS Mear 1 1 1 1 Mear 16.8 29.2 <b>Rep</b> 1	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1 1 <u>95% LC</u> 10.27 20.01 <u>2 Rep 3</u> 1	1 1 16.8 16.8 0.2384 <b>95% UCL</b> 1 1 1 <b>95% UCL</b> 23.33 38.39 <b>Rep 4</b> 1	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.4 Min 1 1 7 15 <b>Rep 5</b> 1	7 1 1 35 51 <b>Rep 6</b> 1	Yes Yes Yes Std Err 0 0 0 Std Err 2.886 4.063 <b>Rep 7</b> 1	Passes A Passes A Passes A Std Dev 0 0 0 Std Dev 9.126 12.85 Rep 8 1	cceptability cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% 0.0% 0.0% 54.32% 44.0% Rep 9 1	Criteria Criteria Criteria <b>%Effec</b> 0.0% 0.0% <b>%Effec</b> 0.0% -73.81% <b>Rep 10</b> 1
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 7d Survival R C-% 0 100 Reproduction C-% 0 100 7d Survival R	7d Survival Rate 7d Survival Rate Reproduction Reproduction Reproduction Control Type Negative Control Summary Control Type Negative Control Reproduction Control Type Negative Control Reproduction Negative Control	Count 10 10 10 10 10 10 Rep 1 1	Contr Contr Contr PMS Mear 1 1 1 1 Mear 16.8 29.2 <b>Rep</b> 1	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1 1 <u>95% LC</u> 10.27 20.01 <u>2 Rep 3</u> 1 1	1 1 16.8 16.8 0.2384 <b>95% UCL</b> 1 1 1 <b>95% UCL</b> 23.33 38.39 <b>Rep 4</b> 1	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.4 Min 1 1 7 15 <b>Rep 5</b> 1	7 1 1 35 51 <b>Rep 6</b> 1	Yes Yes Yes Std Err 0 0 0 Std Err 2.886 4.063 6 <b>Rep 7</b> 1 1	Passes A Passes A Passes A Std Dev 0 0 0 Std Dev 9.126 12.85 Rep 8 1	cceptability cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% 0.0% 0.0% 54.32% 44.0% Rep 9 1	Criteria Criteria Criteria <b>%Effec</b> 0.0% 0.0% <b>%Effec</b> 0.0% -73.81% <b>Rep 10</b> 1 1
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 <b>7d Survival R</b> C-% 0 100 <b>Reproduction</b> C-% 0 100 <b>7d Survival R</b> C-% 0 100 <b>Reproduction</b> <b>Reproduction</b>	7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control Rate Detail Control Type Negative Control	Count 10 10 10 10 10 10 10 11 1 1 1 1 8ep 1	Contr Contr Contr PMS Mear 1 1 1 1 Mear 16.8 29.2 <b>Rep</b> 1 1	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1 1 <u>95% LC</u> 10.27 20.01 <u>2 Rep 3</u> 1 1	1 1 16.8 16.8 0.2384 <b>95% UCL</b> 1 1 1 <b>95% UCL</b> 23.33 38.39 <b>Rep 4</b> 1 1	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.4 Min 1 1 1 7 15 <b>Rep 5</b> 1 1	7 1 1 35 51 <b>Rep 6</b> 1 1	Yes Yes Yes Std Err 0 0 0 Std Err 2.886 4.063 6 <b>Rep 7</b> 1 1	Passes A Passes A Passes A Std Dev 0 0 0 Std Dev 9.126 12.85 Rep 8 1 1	cceptability cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% 0.0% 54.32% 44.0% Rep 9 1 1	Criteria Criteria Criteria <b>%Effec</b> 0.0% 0.0% <b>%Effec</b> 0.0% -73.81% <b>Rep 10</b> 1 1
05-7279-8684 07-8564-8908 00-4293-7593 01-7945-0681 00-4293-7593 <b>7d Survival R</b> C-% 0 100 <b>Reproduction</b> C-% 0 100 <b>7d Survival R</b> C-% 0 100 <b>Reproduction</b> C-%	7d Survival Rate 7d Survival Rate Reproduction Reproduction ate Summary Control Type Negative Control Summary Control Type Negative Control Rate Detail Control Type Negative Control	Count 10 10 10 10 10 10 10 11 1 1 1 1 8ep 1	Contr Contr Contr PMS Mear 1 1 1 Mear 16.8 29.2 Rep 1 1 1	rol Resp rol Resp rol Resp D D <u>95% LC</u> 1 1 1 <u>1</u> <u>1</u> <u>2 Rep 3</u> 1 1 2 Rep 3	1 1 16.8 16.8 0.2384 <b>95% UCL</b> 1 1 1 <b>95% UCL</b> 23.33 38.39 <b>Rep 4</b> 1 1 <b>Rep 4</b>	0.8 - NL 0.8 - NL 15 - NL 0.13 - 0.4 Min 1 1 1 7 15 <b>Rep 5</b> 1 1 <b>Rep 5</b>	7 1 1 35 51 <b>Rep 6</b> 1 1 <b>Rep 6</b>	Yes Yes Yes Std Err 0 0 0 Std Err 2.886 4.063 6 <b>Rep 7</b> 1 1	Passes A Passes A Passes A Std Dev 0 0 0 Std Dev 9.126 12.85 Rep 8 1 1 1	cceptability cceptability cceptability cceptability cceptability 0.0% 0.0% 0.0% 0.0% 54.32% 44.0% Rep 9 1 1 1	Criteria Criteria Criteria <b>%Effec</b> 0.0% 0.0% <b>%Effec</b> 0.0% -73.81% <b>Rep 10</b> 1 1

# **CETIS Summary Report**

Report Date: Test Code:

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

C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Control	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

Analyst:_____QA:

							Test	Code:	PRI0116.	043cer   07	7-3596-567
Ceriodaphni	ia 7-d Survival an	d Reprodu	uction Test					Aquatic Bi	oassay & (	Consulting	Labs, Inc
Analysis ID: Analyzed:	00-4293-7593 20 Jan-16 15:2		• •	roduction ametric Bioe	quivalence-	Two Sample		IS Version: al Results:	CETISv1. Yes	8.7	
Data Transfo	orm	Zeta	Alt Hyp	Trials	Seed	TST b	PMSD	Test Resu	lt		
Untransforme	ed	NA	C*b < T	NA	NA	0.75	23.8%	Passes rep	production		
TST-Welch's	s t Test										
Control	vs C-%		Test Stat			P-Value	P-Type	Decision(			
Negative Cor	ntrol 100*		3.606	0.8702	4.006 13	0.0016	CDF	Non-Signifi	cant Effect		
ANOVA Tabl	le				-						
Source	Sum Squ	ares	Mean Squ	are	DF	F Stat	P-Value	Decision(	x:5%)		
Between	768.8		768.8		1	6.191	0.0229	Significant	Effect		
Error	2235.2		124.1778		18						
Total	3004				19						
Distribution	al Tests										
Attribute	Test			Test Stat	Critical	P-Value	Decision	(α:1%)			
Variances	Variance	Ratio F		1.982	6.541	0.3228	Equal Va	iances			
Variances			y of Variance	0.4973	8.285	0.4897	Equal Va	riances			
Variances		quality of \		1.472	8.285	0.2407	Equal Va				
Distribution		Wilk W Nor		0.9025	0.866	0.0460		istribution			
Distribution	-	rov-Smirno		0.2159	0.2235	0.0153		istribution			
Distribution	-	o Skewne		1.529	2.576	0.1263		istribution			
Distribution	-	no Kurtosis		0.5012	2.576	0.6163	Normal D				
Distribution	-		K2 Omnibus		9.21	0.2741		istribution			
Distribution		-Darling A	2 Normality	0.882	3.878	0.0239		istribution			
Reproductio	on Summary	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Control Type Negative Contro		16.8	10.27	23.33	14	7	35	2.886	54.32%	0.0%
100	Negative Contro	10	29.2	20.01	38.39	26	, 15	51	4.063	44.0%	-73.81%
Reproductio	on Detail					·		<u> </u>			
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Contro		7	26	35	7	13	15	19	11	24
100		47	27	22	42	51	26	18	18	15	26
Graphics			. <u> </u>						· · · · · · · · · · · · · · · · · · ·		
⁶⁰ F						25					
50			·····			20				/	/
E						15				. /	
40 -					1	i i			•	/	
Reproduction		7			1	10 10					
192 30 -						5			/		
-						Ē			/ •		
20						0		/			
		z		Reject Null		-5					
10				REJELL MUII	11 1	Ē		/•			
	l					-10	• • *	•			
° E					_	-15	1/1		łl	1	_
	0 N		100			-2.0	-1.5 -1.0	-0.5 0.0	0.5 1.	0 1.5	2.0
		C-%						Rankits			

Analyst:_____QA:

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CETIS		ytical Repo	rt						eport Date: est Code:			58 (p 1 of 2 7-3596-567
Cerioda	aphnia	7-d Survival and	l Reproduc	tion T	est				Aquatic Bi	oassay &	Consulting	g Labs, Inc
Analysi	is ID:	05-7279-8684	End	point:	7d Survival Rat	e		C	ETIS Version:	CETISv1	.8.7	
Analyze		20 Jan-16 15:26		ysis:	Linear Interpola	ation (ICPI)	N)	c	official Results:	Yes		
Linear	Interpo	lation Options										
X Trans		Y Transform	Seed	ł	Resamples	Exp 95%	CL Me	ethod				
Linear		Linear	0		280	Yes	Tw	o-Point In	erpolation			
Point E	stimate	9S										
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCI	_					
EC5	>100	N/A	N/A	<1	NA	NA					-	
EC10	>100	N/A	N/A	<1	NA	NA						
EC15	>100	N/A	N/A	<1	NA	NA						
EC20	>100	N/A	N/A	<1	NA	NA						
EC25	>100	N/A	N/A	<1	NA	NA						
EC40	>100	N/A	N/A	<1	NA	NA						
EC50	>100	N/A	N/A	<1	NA	NA						
		ate Summary	<b>.</b> .	·			ulated Va				a .	
<u>C-%</u>		ontrol Type	Count	Mear		Max	Std Err	10.00		%Effect	A	B
0 100	N	egative Control	10 10	1 1	1 1	1	0 0	0	0.0%	0.0%	10	10
			10	1			0	0	0.0%	0.0%	10	10
		te Detail		_				_				
<u>C-%</u>		ontrol Type	Rep 1	Rep		Rep 4	Rep 5	Rep 6		Rep 8	Rep 9	Rep 10
0	N	egative Control	1	1	1	1	1	1	1	1	1	1
100			1	1	1	1	1	1	1	1	1	1
		ate Binomials										
C-%		Control Type	Rep 1	Rep		Rep 4	Rep 5	Rep 6		Rep 8	Rep 9	Rep 10
0		Negative Control		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
Graphi	cs											
	1.0											
	0.9											
	Ē											
	0.8											
5	0.7											
7d Survival Rate	0.6											
Staroly	0.5											
. PZ	0.4											
	0.3											
	-											
	0.2											
	0.1 E											
			1	L								
	0.0 E 0	20	40	50	80 100							

Analyst: _____ QA:____

Analysis Analyzer Linear II X Transt Linear Point Es Level IC5 IC10 IC15 IC20 IC25 IC20 IC25 IC40 IC50	d: 20 nterpolat form	-7945-0681 D Jan-16 15:2 ion Options Y Transform Linear 95% LCL N/A N/A N/A N/A N/A N/A	6 Anal n See 7194	lysis: L d F 400 2 TU <1 <1	Reproduction inear Interpola Resamples 280 95% LCL NA	tion (ICPIN) Exp 95% Yes 95% UCL NA	CL Met	Offic	S Version: ial Results: olation	CETISv1 Yes	.8.7	
Linear Ir X Transt Linear Point Es Level IC5 IC10 IC15 IC20 IC25 IC40	nterpolat form stimates % >100 >100 >100 >100 >100 >100 >100	ion Options Y Transform Linear 95% LCL N/A N/A N/A N/A N/A N/A	n Seed 7194 95% UCL N/A N/A N/A	d F 400 2 TU <1 <1	Resamples 280 95% LCL NA	Exp 95% Yes 95% UCL	CL Met	hod		Yes	· · · · · · · · · · · · · · · · · · ·	
X Transf Linear Point Es Level IC5 IC10 IC15 IC20 IC25 IC40	form stimates % >100 >100 >100 >100 >100 >100 >100 >100	Y Transform Linear 95% LCL N/A N/A N/A N/A N/A	7194 95% UCL N/A N/A N/A	100 2 TU <1 <1	95% LCL NA	Yes 95% UCL			olation		· · · · ·	
Linear Point Es Level IC5 IC10 IC15 IC20 IC25 IC40	stimates % >100 >100 >100 >100 >100 >100 >100	Linear 95% LCL N/A N/A N/A N/A N/A N/A	7194 95% UCL N/A N/A N/A	100 2 TU <1 <1	95% LCL NA	Yes 95% UCL			olation			
Point Es Level IC5 IC10 IC15 IC20 IC25 IC40	% >100 >100 >100 >100 >100 >100	95% LCL N/A N/A N/A N/A N/A	95% UCL N/A N/A N/A	TU <1 <1	95% LCL NA	95% UCL	Two	-Point Interp	olation			
Level IC5 IC10 IC15 IC20 IC25 IC40	% >100 >100 >100 >100 >100 >100	N/A N/A N/A N/A N/A	N/A N/A N/A	<1 <1	NA		-					
IC5 IC10 IC15 IC20 IC25 IC40	>100 >100 >100 >100 >100 >100 >100	N/A N/A N/A N/A N/A	N/A N/A N/A	<1 <1	NA							
IC10 IC15 IC20 IC25 IC40	>100 >100 >100 >100 >100	N/A N/A N/A N/A	N/A N/A	<1		NIA						
IC15 IC20 IC25 IC40	>100 >100 >100 >100	N/A N/A N/A	N/A			NA						
IC20 IC25 IC40	>100 >100 >100	N/A N/A			NA	NA						
IC25 IC40	>100 >100	N/A	N/A	<1	NA	NA						
IC40	>100			<1	NA	NA						
		b t / A	N/A	<1	NA	NA						
1050	>100	N/A	N/A	<1	NA	NA						
1050		N/A	N/A	<1	NA	NA						
Reprodu	uction Su	mmary				Cai	culated Va	ariate				
C-%	Con	trol Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect		
0	Neg	ative Control	10	16.8	7	35	2.886	9.126	54.32%	0.0%		
100			10	29.2	15	51	4.063	12.85	44.0%	-73.81%		
Reprodu	uction De	tail										
C-%	Con	trol Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep
0	Neg	ative Control	11	7	26	35	7	13	15	19	11	24
100			47	27	22	42	51	26	18	18	15	26
Graphic	s											
	30 -											
	25											
	-											
	20											
ction	E											
Reprodu	15 -											
5												
	10 -											
	Ē											
	5											
	-											
	٥ <del>لــــــ</del>	20	40 (	60	80 100							

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CETIS Ana	lytical Repo	rt					-	rt Date: Code:		2 Jan-16 09: 6.043cer   0	
Ceriodaphnia	17-d Survival and	Repro	duction Test					Aquatic Bi	oassay 8	Consulting	g Labs, Inc.
Analysis iD: Analyzed:	07-8564-8908 20 Jan-16 15:26		indpoint: 7d S nalysis: Sing		te itingency Tal	ble		S Version: ial Results:	CETISv Yes	1.8.7	
Data Transfo	rm	Zeta	Alt Hyp	Trials	Seed			Test Resu			
Untransformed	d		C > T	NA	NA			Passes 7d	survival r	ate	
Fisher Exact	Test										
Control	vs C-%		Test Stat	P-Value	P-Type	Decision					
Negative Cont	trol 100		1	1.0000	Exact	Non-Sign	ificant Effect				
Data Summai	ry										
C-%	Control Type	NR	R	NR + R	Prop NR	Prop R	%Effect				
0	Negative Contr	10	0	10	1	0	0.0%				
100		10	0	10	1	0	0.0%				
7d Survival R	tate Detail										
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Control		1	1	1	1	1	1	1	1	1
100		1	1	1	1	1	1	1	1	1	1
7d Survival R	ate Binomials										
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Control		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 1.0 0.9 0.8 0.7 0.7 0.7 0.7 0.7 0.5 0.5 0.4 0.3 0.3 0.4 0.3 0.3 0.5 0.3 0.4 0.3 0.4 0.3 0.4 0.3 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 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 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0	•		•								
0.0 [	0 N		100								

Analyst: _____ QA: _____

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CETIS Mea	isurement F	Repor	t					Report Date: Test Code:			59 (p 1 of 2) 7-3596-5673
Ceriodaphnia	7-d Survival an	d Repr	oduction Te	est				Aquati	c Bioassay &	Consulting	g Labs, Inc.
Batch ID: Start Date: Ending Date: Duration:	05-1344-8268 06 Jan-16 14:2 13 Jan-16 14:4 7d 0h	1 5	Test Type: Protocol: Species: Source:	Reproduction- EPA/821/R-02 Ceriodaphnia of Aquatic Biosys	-013 (2002) Iubia	ŀ			aboratory Wa lot Applicable		
Sample ID: Sample Date: Receive Date: Sample Age:		0 2	Code: Material: Source: Station:	PRI0116.043c Sample Water Bioassay Repo LAILG-NGA-64	ort				acific Ridgelin lursery Growe		ion
Alkalinity (Ca	CO3)-mg/L										
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Мах	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	64.88	62.71	67.04	63	68	0.9149	2.588	3.99%	0
100		8	48	48	48	48	48	0	0	0.0%	0
Overall		16	56.44			48	68				0 (0%)
Conductivity-	µmhos										
C-%	Control Type	Count		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	328.4	326	330.8	323	332	1.017	2.875	0.88%	0
100		8	150.5	146.6	154.4	142	157	1.669	4.721	3.14%	0
Overall		16	239.4			142	332				0 (0%)
Dissolved Oxy	ygen-mg/L										
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	8.1	7.686	8.514	7.7	9.2	0.1753	0.4957	6.12%	0
100		8	6.538	5.68	7.395	5.5	8.6	0.3625	1.025	15.68%	0
Overall		16	7.319			5.5	9.2				0 (0%)
Hardness (Ca	CO3)-mg/L										
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	92.63	89.6	95.65	90	97	1.281	3.623	3.91%	0
100		8	115	115	115	115	115	0	0	0.0%	0
Overall		16	103.8			90	115				0 (0%)
pH-Units											
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	8.025	7.803	8.247	7.6	8.3	0.09402	0.2659	3.31%	0
100		8	7.788	7.585	7.99	7.5	8.1	0.08544	0.2416	3.1%	0
Overall		16	7.906			7.5	8.3				0 (0%)
Temperature-	°C										
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	24.13	23.93	24.32	24	24.5	0.08183	0.2315	0.96%	0
100		8	24.17	23.97	24.36	24	24.5	0.08287	0.2344	0.97%	0
Overall		16	24.15			24	24.5				0 (0%)

- QA: P Analyst:

CETIS N	leasurement F	Report						eport Date: est Code:	22 Jan-16 09:59 (p 2 of 2) PRI0116.043cer   07-3596-5673
Ceriodaph	nia 7-d Survival an	d Reprod	uction Tes	t				Aquatic	Bioassay & Consulting Labs, Inc.
Alkalinity	(CaCO3)-mg/L								<u> </u>
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	68	68	68	63	63	63	63	63
100		48	48	48	48	48	48	48	48
Conductiv	ity-µmhos								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	328	332	323	328	330	326	329	331
100		142	147	153	155	150	157	151	149
Dissolved	Oxygen-mg/L								
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	7.8	8.4	7.7	7.8	7.9	7.9	8.1	9.2
100		8.6	5.6	6.1	6.2	7	7.2	6.1	5.5
Hardness	(CaCO3)-mg/L	1							
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	97	97	97	90	90	90	90	90
100		115	115	115	115	115	115	115	115
pH-Units									
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	8.1	7.9	7.7	8.3	8.1	8.2	7.6	8.3
100		7.7	7.7	8.1	8.1	8	7.5	7.6	7.6
Temperatu	ire-°C							1	······································
C-%	Control Type	1	2	3	4	5	6	7	8
0	Negative Contr	24	24	24	24.5	24	24	24.5	24
100		24.32	24	24	24.5	24	24.5	24	24

Analyst: _____QA:___

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January 27, 2016

Mr. Bryn Home Pacific Ridgeline, Inc. 230 Dove Court Santa Paula, CA 93060

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, Inc.
SAMPLE I.D.:	LAILG-NGA-64-4
DATE RECEIVED:	6 Jan -16
ABC LAB. NO.:	PRI0116.043

### CHRONIC SELENASTRUM ALGAE GROWTH BIOASSAY

NOEC TUc	;	100.00 % 1.00
IC25 IC50	=	>100.00 % >100.00%

Yours very truly,

Scott Johnson Laboratory Director

CETIS Sum	mary Repor	t						port Date: st Code:			44 (p 1 of 1 5-0467-3206
Selenastrum G	Growth Test								ioassay & C	· ·	
Batch ID:	19-7023-3868	Test	Type:	Cell Growth			An	alyst:			· · · · · ·
Start Date:	06 Jan-16 16:00			EPA/821/R-02-0	013 (2002)		Dil	uent: Labo	oratory Wate	er	
Ending Date:	10 Jan-16 14:20	Spec	ies:	Selenastrum ca	pricornutum		Bri	ne: Not	Applicable		
Duration:	94h	Sour	ce:	Aquatic Biosyst	ems, CO		Ag	e:			
Sample ID:	08-1164-5064	Code	ə:	PRI0116.043se	I		Cli	ent: Pac	fic Ridgeline	e, Inc.	
Sample Date:	05 Jan-16 08:30	Mate	rial:	Sample Water			Pre	oject: Nurs	ery Growers	s Associati	on
Receive Date:	06 Jan-16 13:12	Sour	ce:	Bioassay Repo	rt						
Sample Age:	32h (12 °C)	Stati	on:	LAILG-NGA-64	-4						
Comparison S	ummary										
Analysis ID	Endpoint		NOEL	LOEL	TOEL	PMSD	TU	Method			
14-4855-8015	Cell Density		100	>100	NA	2.44%	1	TST-Weld	h's t Test		
Point Estimate	e Summary										
Analysis ID	Endpoint		Level	%	95% LCL	95% UCL	TU	Method			
11-1327-3066	Cell Density		IC5	26.31	18.04	47.85	3.801	Linear Inte	erpolation (IC	CPIN)	
			IC10	52.62	36.09	95.71	1.9				
			IC15	78.93	54.13	N/A	1.267				
			IC20	>100	N/A	N/A	<1				
			IC25	>100	N/A	N/A	<1				
			IC40	>100	N/A	N/A	<1				
			IC50	>100	N/A	N/A	<1				
Test Acceptab	oility										
Analysis ID	Endpoint		Attribu	ute	Test Stat	TAC Limi	ts	Overlap	Decision		
11-1327-3066	Cell Density		Contro	ICV	0.01571	NL - 0.2		Yes	Passes Ac	cceptability	Criteria
14-4855-8015	Cell Density		Contro	ICV	0.01571	NL - 0.2		Yes	Passes Ac	cceptability	Criteria
11-1327-3066	Cell Density		Contro	l Resp	1.53E+6	1.00E+6 -	NL	Yes	Passes Ac	cceptability	Criteria
14-4855-8015	Cell Density		Contro	l Resp	1.53E+6	1.00E+6 -	NL	Yes	Passes Ac	cceptability	Criteria
14-4855-8015	Cell Density		PMSD		0.02437	0.091 - 0.2	29	Yes	Below Acc	eptability (	Criteria
Cell Density S	ummary										
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Negative Control	4	1.527E	E+6 1.489E+6	1.565E+6	1.496E+6	1.554E+			1.57%	0.0%
100		4	1.237E	E+6 1.085E+6	1.389E+6	1.151E+6	1.369E-	6 4.782E+4	9.565E+4	7.73%	19.0%
Cell Density D	etail										
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4						
0	Negative Control	1.496E+6	1.526E	E+6 1.533E+6	1.554E+6						
100		1.369E+6	1.186E	E+6 1.242E+6	1.151E+6						

Analyst: _____ QA:____

000-055-186-3

CETIS™ v1.8.7.11

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CETIS Ana	lytical Repo	rt					-	rt Date: Code:			44 (p 1 of 1) 5-0467-3206
Selenastrum	Growth Test							Aquatic B	ioassay & C	Consultin	g Labs, Inc.
Analysis ID: Analyzed:	14-4855-8015 27 Jan-16 9:44	•		l Density ametric Bioe	equivalence-	Two Sample		S Version: al Results:	CETISv1. Yes	8.7	
Data Transfor	m	Zeta	Alt Hyp	Trials	Seed	TST b	PMSD	Test Resu	lt		
Untransformed	1	NA	C*b < T	NA	NA	0.75	2.44%	Passes ce	li density		
TST-Weich's	t Test										
Control	vs C-%		Test Stat	Critical	MSD DF	P-Value	P-Type	Decision(	a:25%)		
Negative Cont	rol 100*		1.882	0.7649	37220 3	0.0782	CDF	Non-Signif	icant Effect		
ANOVA Table											"
Source	Sum Squa	ires	Mean Squ	Jare	DF	F Stat	P-Value	Decision(	a:5%)		
Between	1.684901E		1.684901		1	34.65	0.0011	Significant			
Error	291727500	000	48621250	00	6	_		-			
Total	1.976629E	+11			7						
Distributional	Tests										
Attribute	Test			Test Stat	Critical	P-Value	Decision(	α:1%)			
Variances	Variance I	Ratio F		15.89	47.47	0.0480	Equal Vari				
Variances	Mod Leve	ne Equality	of Variance	2.853	13.75	0.1422	Equal Vari				
Variances	Levene Ed	quality of Va	ariance	3.505	13.75	0.1104	Equal Vari	ances			
Distribution	Shapiro-W	Vilk W Norm	ality	0.9144	0.6451	0.3862	Normal Dis	stribution			
Distribution	Kolmogor	ov-Smirnov	D	0.2145	0.3313	0.3921	Normal Dis	stribution			
Distribution	Anderson	-Darling A2	Normality	0.4325	3.878	0.3084	Normal Di	stribution			
Cell Density S	Summary										
C-%	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1.527E+6	1.489E+6	1.565E+6	1530000	1.496E+6	1.554E+6	1.200E+4	1.57%	0.0%
100		4	1.237E+6	1.085E+6	1.389E+6	1214000	1.151E+6	1.369E+6	4.782E+4	7.73%	19.0%
Cell Density [	Detail										
C-%	Control Type	Rep 1	Rep 2	Rep 3	Rep 4						
0	Negative Control	1.496E+6	1.526E+6	1.533E+6	1.554E+6						
100		1.369E+6	1.186E+6	1.242E+6	1.151E+6						
Graphics											
1600000	_					1.4E+05 —					
1800000		=		Reject Null		1.26+05					•
1400000						1.0E+05					
						E				/	/
1200000			L		-	B.0E+04				/	
Cell Deusity						6.0E+04				/	
					ē	6.0E+04 4.0E+04				•	
800000						ZUETUT					
600000						0.0E+00		/			
100 2000 00000						-2.0E+04		×			
400000						-4.0E+04	•				
200000						-6.0E+04	/				
						-8.0E+04	/				3
	-	1.21									1.1
0	0 N	1	10	10	-	-1.0E+05	-1.0	-0.5 0.1	0.5	1.0	1.5

Analyst:

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QA:

CETIS	6 Analy	tical Repo	rt					Repo Test (	rt Date: Code:	27 Jan-16 09:44 (p 1 of PRI0116.043sel   05-0467-320
Selena	strum Gi	owth Test							Aquatic Bi	oassay & Consulting Labs, Inc
Analys	is ID:	11-1327-3066	End	ooint: C	eli Density			CETI	S Version:	CETISv1.8.7
Analyz	ed:	27 Jan-16 9:44	Anal	ysis: L	inear Interpola	tion (ICPIN)		Offici	al Results:	Yes
Linear	Interpola	tion Options								
X Tran	sform	Y Transform	Seed	I F	lesamples	Exp 95%	CL Meth	od		
Linear		Linear	0	2	80	Yes	Two-F	Point Interpo	lation	
Point E	Estimates	;								
Level	%	95% LCL	95% UCL	TU	95% LCL	95% UCL				
IC5	26.31	18.04	47.85	3.801	2.09	5.542				
IC10	52.62	36.09	95.71	1.9	1.045	2.771				
IC15	78.93	54.13	N/A	1.267	NA	1.847				
IC20	>100	N/A	N/A	<1	NA	NA				
IC25	>100	N/A	N/A	<1	NA	NA				
IC40	>100	N/A	N/A	<1 <1	NA NA	NA NA				
IC50	>100	N/A	N/A	<r style="text-decoration-color: blue;"></r>						· · · · · · · · · · · · · · · · · · ·
	ensity Su		<b>.</b> .				ulated Var			
C-%		ntrol Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect
0	Ne	gative Control	4	1.527E-				2.399E+4		0.0%
100			4	1.2378	+6 1.151E+6	1.309E+0	4./82E+4	9.000E+4	1.13%	19.0%
	ensity De									
C-%		ntrol Type	Rep 1	Rep 2	Rep 3	Rep 4				
0	Ne	gative Control		1.526E-						
100			1.369E+6	1.186E-	+6 1.242E+6	1.151E+6				
Graphi	ics									
	1.6E+06									
	1.4E+06									
	1.2E+D6									
į	1.0E+06									
4										
e e	6.0E+05									
	4.0E+05									
	2.0E+05									
	L									
	0.0E+00	20	40	 60	80 100					

P Analyst:____QA:__

CETIS Mea	surement F	Repo	rt					eport Date: est Code:			05-0467-3206		
Selenastrum (	Growth Test								c Bioassay &				
Batch ID: Start Date: Ending Date: Duration:	19-7023-3868 06 Jan-16 16:0 10 Jan-16 14:2 94h		Test Type: Protocol: Species: Source:	Cell Growth EPA/821/R-02 Selenastrum c Aquatic Biosys	apricornutur	n	D	Analyst: Diluent: Laboratory Water Brine: Not Applicable Age:					
•	08-1164-5064 05 Jan-16 08:3 06 Jan-16 13:1 32h (12 °C)		Code: Material: Source: Station:	PRI0116.043s Sample Water Bioassay Repo LAILG-NGA-64	ort				acific Ridgelir lursery Growe		tion		
Alkalinity (Ca	CO3)-mg/L												
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count		
0	Negative Contr	1	70		-	70	70	0	0	0.0%	0		
100		1	48			48	48	0	0	0.0%	0		
Overall		2	59			48	70				0 (0%)		
Conductivity-	µmhos												
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count		
0	Negative Contr	5	413	408.8	417.2	410	418	1.517	3.391	0.82%	0		
100		5	261.6	252.2	271	251	269	3.4	7.603	2.91%	0		
Overall		10	337.3			251	418				0 (0%)		
Hardness (Ca	CO3)-mg/L												
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count		
0	Negative Contr	1	100			100	100	0	0	0.0%	0		
100		1	115			115	115	0	0	0.0%	0		
Overall		2	107.5			100	115				0 (0%)		
pH-Units													
C-%	Control Type	Coun		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count		
0	Negative Contr	5	7.68	7.576	7.784	7.6	7.8	0.03742	0.08367	1.09%	0		
100		5	7.9	7.338	8.462	7.6	8.7	0.2025	0.4528	5.73%	0		
Overall		10	7.79			7.6	8.7				0 (0%)		
Temperature-	°C												
C-%	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count		
0	Negative Contr	5	24.2	23.86	24.54	24	24.5	0.1225	0.2739	1.13%	0		
100		5	24.2	23.86	24.54	24	24.5	0.1225	0.2739	1.13%	0		
Overall		10	24.2			24	24.5				0 (0%)		

ę'

000-055-186-3

27 Jan-16 09:44 (p 1 of 2) PRI0116.043sel | 05-0467-3206

Report Date:

CETIS M	leasurement F	Report					Report Date: Test Code:	27 Jan-16 09:44 (p 2 of 2) PRI0116.043sel   05-0467-3206
Selenastru	um Growth Test						Aquatic E	Bioassay & Consulting Labs, Inc.
Alkalinity (	(CaCO3)-mg/L							· · · · · · · · · · · · · · · · · · ·
C-%	Control Type	1						
0	Negative Contr	70						
100		48						
Conductiv	rity-µmhos							
C-%	Control Type	1	2	3	4	5		
0	Negative Contr	410	411	411	415	418		
100		251	257	263	268	269		
Hardness	(CaCO3)-mg/L							
C-%	Control Type	1						
0	Negative Contr	100						· · · · · · · · · · · · · · · · · · ·
100		115						
pH-Units								
C-%	Control Type	1	2	3	4	5		
0	Negative Contr	7.6	7.7	7.6	7.7	7.8		
100		8.7	7.8	7.6	7.7	7.7		
Temperatu	ure-°C							
C-%	Control Type	1	2	3	4	5		
0	Negative Contr	24.5	24.5	24	24	24		
100		24.5	24.5	24	24	24		

000-055-186-3

Analyst:_____ QA:____

4



### CHRONIC FATHEAD MINNOW SURVIVAL AND GROWTH BIOASSAY

DATE:

6 January 2016

STANDARD TOXICANT: Copper Chloride

ENDPOINT: SURVIVAL

NOEC = 38.00 ug/l

EC25 = 45.88 ug/l EC50 = 58.39 ug/l

ENDPOINT: GROWTH

NOEC = 19.00 ug/l

IC25 =	30.24 ug/l
IC50 =	49.32 ug/l

Yours very truly,

Scott Johnson Laboratory Director

CETIS Sum	nmary Report						Report Date: Fest Code:		Jan-16 12:2 _010616   18	
Fathead Minne	ow 7-d Larval Survi	val and Growt	h Test				Aquatic	Bioassay &	Consulting	Labs, Ind
Batch ID:	05-3787-4752	Test Type:	Growth-Surviva	il (7d)			Analyst:			
Start Date:	06 Jan-16 13:50	Protocol:	EPA/821/R-02-	013 (2002)		I	Diluent: La	boratory Wat	er	
Ending Date:	13 Jan-16 11:50	Species:	Pimephales pro	omelas		F	Brine: No	ot Applicable		
Duration:	6d 22h	Source:	Aquatic Biosyst	tems, CO			Age:			
Sample ID:	12-7379-3699	Code:	FML010616			(	Client: ABC Labs			
Sample Date:	06 Jan-16 13:50	Material:	••			F	Project: RI	EF TOX		
Receive Date:		Source:	Reference Toxi	cant						
Sample Age:	NA	Station:	REF TOX							
Comparison S	ummary									
Analysis ID	Endpoint	NOEL	. LOEL	TOEL	PMSD	τυ	Method			
13-2406-5401	7d Survival Rate	38	75	53.39	14.5%		Dunnett	Multiple Com	parison Tes	st
07-4926-4741	Mean Dry Biomass	-mg 19	38	26.87	18.1%		Dunnett	Multiple Com	parison Tes	st
Point Estimate	e Summary									
Analysis ID	Endpoint	Level	F-0-	95% LCL	95% UCL	ΤU	Method			
04-8272-9535	7d Survival Rate	EC5	22.01	10.58	49.41		Linear Ir	nterpolation (l	CPIN)	
		EC10	38.38	17.51	43.26					
		EC15	40.88	33.77	45.38					
		EC20	43.38	38.19	47.65					
		EC25	45.88	41.06	50.1					
		EC40	53.39	49.14	58.09					
		EC50	58.39	54.31	64.09					
06-4915-6096	Mean Dry Biomass	-	12.82	10.73	17.21		Linear Ir	nterpolation (I	CPIN)	
		IC10	15.64	12.51	24.11					
		IC15	18.46	13.88	35.55					
		IC20	24.02	13.53	49.02					
		IC25	30.24	15.5	49.09					
		IC40	43.29	28.44	53.89					
		IC50	49.32	35.59	58.4					
Test Acceptab	•									
Analysis ID	Endpoint 7d Survival Rate	Attrib	ute ol Resp	Test Stat 0.9833		its	Overlap Yes		aantahilitu	Critorio
13-2406-5401				0.9833	0.8 - NL				cceptability	
			ol Resp		0.8 - NL 0.25 - NL		Yes		cceptability	
	Mean Dry Biomass- Mean Dry Biomass-	-	ol Resp	0.3072			Yes		cceptability	
07-4926-4741	Mean Dry Biomass-	-	ol Resp	0.3072	0.25 - NL		Yes		cceptability	
		mg PMSE	,	0.1805	0.12 - 0.3		Yes	rasses A	cceptability	Chierla
7d Survival Ra	-		050/ 1 01	059/ 1101	881-	N/	044 E	Q4d Davi	C)///	0/ =====
	Control Type Co Negative Control 4	ount Mean 0.983		95% UCL	Min 0.9333	Max	0.01667	Std Dev	CV% 3.39%	%Effe
0 10	-	0.983	3 0.9303 1		0.9333	1		0.03333 0		0.0%
19	4	0.95	0.8484	1	0.8667	1 1	0 0.03191	0 0.06383	0.0% 6.72%	-1.7% 3 30%
38	4	0.95	0.8484	1	0.8007	1	0.03191		6.72% 9.56%	3.39%
56 75	4	0.9		0.3698	0.8	0.333			9.56% 76.59%	8.48% 83.05%
75 150	4	0.188		0.3698	0.06667	0.333	0.06383		76.59% 135.4%	86.44%
	nass-mg Summary			-						
-		ount Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effe
	Negative Control 4	0.307		0.3549	0.2893	0.352			9.76%	0.0%
10	4	0.339		0.3829	0.3007	0.364			3.70 <i>%</i> 8.14%	-10.36
19	4	0.339		0.3029	0.3007	0.384		0.02758	7.96%	11.619
38	4	0.271		0.3059	0.2407	0.299			7.90 <i>%</i> 25.28%	27.67%
		0.222			0.006	0.271			25.20% 73.54%	92.51%
75										ar 017
75 150	4	0.025		0.07026	0	0.040			112.6%	91.81%

Analyst:_____QA:____

## **CETIS Summary Report**

Fathead Minnow 7-d Larval Survival and Growth Test

Aquatic Bioassay & Consulting Labs, Inc.

Report Date:
Test Code:

7d Surviva	al Rate Detail				
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Negative Control	1	1	0.9333	1
10		1	1	1	1
19		1	1	0.8667	0.9333
38		0.8667	0.9333	0.8	1
75		0.06667	0.06667	0.3333	0.2
150		0	0.4	0.06667	0.06667

#### Mean Dry Biomass-mg Detail

C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Negative Control	0.352	0.2893	0.2927	0.2947
10		0.3387	0.3527	0.3007	0.364
19		0.2713	0.2993	0.2467	0.2687
38		0.1893	0.2713	0.16	0.268
75		0.006	0.01667	0.046	0.02333
150		0	0.06533	0.02267	0.01267

#### 7d Survival Rate Binomials

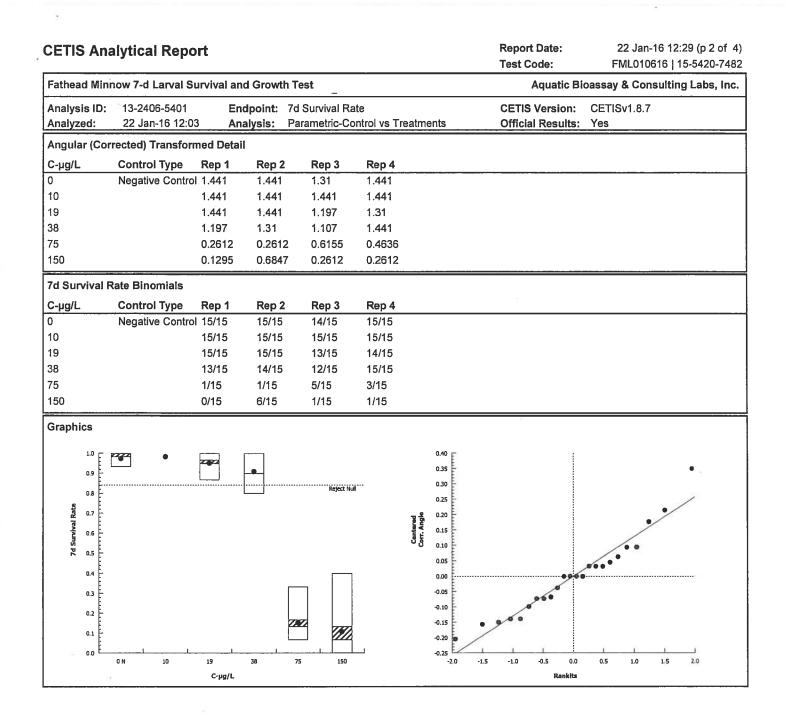
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4
0	Negative Control	15/15	15/15	14/15	15/15
10		15/15	15/15	15/15	15/15
19		15/15	15/15	13/15	14/15
38		13/15	14/15	12/15	15/15
75		1/15	1/15	5/15	3/15
150		0/15	6/15	1/15	1/15

Analyst:_____QA:___P

	lytical Repo						Test			010616   15	
Fathead Minn	now 7-d Larval Su	Irvival and	d Growth Tes	st				Aquatic Bi	ioassay & (	Consulting	Labs, Ir
Analysis ID: Analyzed:	13-2406-5401 22 Jan-16 12:03		<b>ipoint:</b> 7d S I <b>lysis: P</b> ara		e ntrol vs Trea	tments		IS Version: al Results:	CETISv1.8.7 Yes		
Data Transfor	rm	Zeta	Alt Hyp	Trials	Seed		PMSD	NOEL	LOEL	TOEL	τυ
Angular (Corre	ected)	NA	C > T	NA	NA		14.5%	38	75	53.39	
Dunnett Multi	iple Comparison	Test									
Control	vs C-µg/L		Test Stat	Critical	MSD DF	P-Value	P-Type	Decision(	a:5%)		
Negative Cont			-0.3197	2.407	0.248 6	0.9103	CDF		icant Effect		
C C	19		0.5931	2.407	0.248 6	0.6064	CDF	-	icant Effect		
	38		1.404	2.407	0.248 6	0.2600	CDF	_	icant Effect		
	75*		9.788	2.407	0.248 6	<0.0001	CDF	Significant			
	150*		10.43	2.407	0.248 6	< 0.0001	CDF	Significant			
ANOVA Table	)										
Source	Sum Squa	res	Mean Squ	are	DF	F Stat	P-Value	Decision(	a:5%)		
Between	5.393576		1.078715		5	50.85	<0.0001	Significant			
Error	0.3818108		0.0212117	1	18						•
Total	5.775386				23	_					
Distributional	Tests										
Attribute	Test			Test Stat	Critical	P-Value	Decision	(α:1%)			
Variances	Mod Leve	ne Equality	of Variance	1.381	4.248	0.2777	Equal Var				-
Variances		quality of V		3.299	4.248	0.0274	Equal Variances				
Distribution		lik W Norr		0.9486	0.884	0.2531	Normal D				
Distribution	-	ov-Smirnov	•	0.111	0.2056	0.6409	Normal D				
Distribution		o Skewnes		1.759	2.576	0.0785	Normal D				
Distribution	D'Agostino		3	1.26	2.576	0.2077	Normal D				
Distribution	-					0.2077					
Distribution	-		K2 Omnibus ! Normality	4.005 0.4413	9.21 3.878	0.0982	Normal D Normal D				
7d Survival R											
C-µg/L	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effec
0	Negative Control		0.9833	0.9303	1	1	0.9333	1	0.01667	3.39%	0.0%
10	Negative Control	4			1	1	1	1	0.01007	0.0%	-1.7%
		4	1	1		0.9667	0.8667	1	0.03191	6.72%	3.39%
		A	0.05	N 0 4 0 4					0.03191		3.39%
19		4	0.95	0.8484	1					0 500/	0 4007
19 38		4	0.9	0.763	1	0.9	0.8	1	0.04303	9.56%	8.48%
19 38 75		4 4	0.9 0.1667	0.763 0	1 0.3698	0.9 0.1333	0.8 0.06667	1 0.3333	0.04303 0.06383	76.59%	83.05%
19 38 75 150		4 4 4	0.9 0.1667 0.1333	0.763	1	0.9	0.8	1	0.04303		8.48% 83.05% 86.44%
19 38 75 150 Angular (Corr	rected) Transform	4 4 4 ned Summ	0.9 0.1667 0.1333 nary	0.763 0 0	1 0.3698 0.4206	0.9 0.1333 0.06667	0.8 0.06667 0	1 0.3333 0.4	0.04303 0.06383 0.09027	76.59% 135.4%	83.05% 86.44%
19 38 75 150 Angular (Corr C-μg/L	Control Type	4 4 ned Summ Count	0.9 0.1667 0.1333 nary Mean	0.763 0 0 95% LCL	1 0.3698 0.4206 <b>95% UCL</b>	0.9 0.1333 0.06667 Median	0.8 0.06667 0 Min	1 0.3333 0.4 Max	0.04303 0.06383 0.09027 Std Err	76.59% 135.4% CV%	83.05% 86.44% %Effec
19 38 75 150 <b>Angular (Corr</b> <b>C-μg/L</b> 0		4 4 4 ned Summ Count 4	0.9 0.1667 0.1333 hary Mean 1.408	0.763 0 0 95% LCL 1.304	1 0.3698 0.4206 95% UCL 1.513	0.9 0.1333 0.06667 Median 1.441	0.8 0.06667 0 Min 1.31	1 0.3333 0.4 Max 1.441	0.04303 0.06383 0.09027 Std Err 0.03292	76.59% 135.4% CV% 4.68%	83.05% 86.44% %Effec 0.0%
19 38 75 150 <b>Angular (Corr</b> <b>C-μg/L</b> 0 10	Control Type	4 4 4 med Summ Count 4 4	0.9 0.1667 0.1333 hary Mean 1.408 1.441	0.763 0 0 95% LCL 1.304 1.441	1 0.3698 0.4206 95% UCL 1.513 1.442	0.9 0.1333 0.06667 Median 1.441 1.441	0.8 0.06667 0 Min 1.31 1.441	1 0.3333 0.4 Max 1.441 1.441	0.04303 0.06383 0.09027 Std Err 0.03292 0	76.59% 135.4% CV% 4.68% 0.0%	83.05% 86.44% %Effec 0.0% -2.34%
19 38 75 150 <b>Angular (Corr</b> <b>C-μg/L</b> 0 10 19	Control Type	4 4 4 <b>Count</b> 4 4	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347	0.763 0 0 95% LCL 1.304 1.441 1.16	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535	0.9 0.1333 0.06667 Median 1.441 1.441 1.375	0.8 0.06667 0 Min 1.31 1.441 1.197	1 0.3333 0.4 Max 1.441 1.441 1.441	0.04303 0.06383 0.09027 Std Err 0.03292 0 0.05894	76.59% 135.4% CV% 4.68% 0.0% 8.75%	83.05% 86.44% %Effec 0.0% -2.34% 4.34%
19 38 75 150 <b>Angular (Corr</b> <b>C-μg/L</b> 0 10 19 38	Control Type	4 4 4 med Summ Count 4 4	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347 1.264	0.763 0 0 95% LCL 1.304 1.441 1.16 1.034	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494	0.9 0.1333 0.06667 Median 1.441 1.441 1.375 1.253	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441	0.04303 0.06383 0.09027 Std Err 0.03292 0 0.05894 0.07224	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27%
19 38 75 150 Angular (Corr C-μg/L 0 10 19 38 75	Control Type	4 4 4 <b>Count</b> 4 4 4 4 4	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347 1.264 0.4004	0.763 0 0 95% LCL 1.304 1.441 1.16 1.034 0.1262	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494 0.6745	0.9 0.1333 0.06667 Median 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%
19 38 75 150 Angular (Corr C-µg/L 0 10 19 38 75	Control Type	4 4 4 <b>Count</b> 4 4 4	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347 1.264	0.763 0 0 95% LCL 1.304 1.441 1.16 1.034	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494	0.9 0.1333 0.06667 Median 1.441 1.441 1.375 1.253	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441	0.04303 0.06383 0.09027 Std Err 0.03292 0 0.05894 0.07224	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%
19 38 75 150 <b>Angular (Corr</b> <b>C-μg/L</b> 0 10 19 38	Control Type Negative Contr	4 4 4 <b>Count</b> 4 4 4 4 4	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347 1.264 0.4004	0.763 0 0 95% LCL 1.304 1.441 1.16 1.034 0.1262	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494 0.6745	0.9 0.1333 0.06667 Median 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%
19 38 75 150 <b>Angular (Corr</b> <b>C-μg/L</b> 0 10 19 38 75 150	Control Type Negative Contr	4 4 4 <b>Count</b> 4 4 4 4 4	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347 1.264 0.4004	0.763 0 0 95% LCL 1.304 1.441 1.16 1.034 0.1262	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494 0.6745	0.9 0.1333 0.06667 Median 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%
19 38 75 150 Angular (Corr C-µg/L 0 10 19 38 75 150 76 Survival R C-µg/L	Control Type Negative Contr	4 4 4 <b>Count</b> 4 4 4 4 4 8 8 8 8 8 8 9	0.9 0.1667 0.1333 hary Mean 1.408 1.441 1.347 1.264 0.4004 0.3341	0.763 0 0 95% LCL 1.304 1.441 1.16 1.034 0.1262 -0.05069	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494 0.6745 0.7189	0.9 0.1333 0.06667 Median 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%
19 38 75 150 <b>Angular (Corr</b> <b>C-μg/L</b> 0 10 19 38 75 150 <b>7d Survival R</b>	Control Type Negative Contr ate Detail Control Type	4 4 4 <b>Count</b> 4 4 4 4 4 8 8 8 8 8 8 9	0.9 0.1667 0.1333 hary Mean 1.408 1.441 1.347 1.264 0.4004 0.3341 Rep 2	0.763 0 0 95% LCL 1.304 1.441 1.16 1.034 0.1262 -0.05069 Rep 3	1 0.3698 0.4206 95% UCL 1.513 1.442 1.535 1.494 0.6745 0.7189 Rep 4	0.9 0.1333 0.06667 Median 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27%
19 38 75 150 <b>Angular (Corr</b> <b>C-μg/L</b> 0 10 19 38 75 150 <b>7d Survival R</b> <b>C-μg/L</b> 0 10	Control Type Negative Contr ate Detail Control Type	4 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0.9 0.1667 0.1333 hary Mean 1.408 1.441 1.347 1.264 0.4004 0.3341 Rep 2 1	0.763 0 9 <b>5% LCL</b> 1.304 1.441 1.16 1.034 0.1262 -0.05069 <b>Rep 3</b> 0.9333 1	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494 0.6745 0.7189 <b>Rep 4</b> 1	0.9 0.1333 0.06667 <b>Median</b> 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%
19 38 75 150 Angular (Corr C-μg/L 0 10 19 38 75 150 7d Survival R C-μg/L 0 10 19	Control Type Negative Contr ate Detail Control Type	4 4 4 <b>Count</b> 4 4 4 4 4 4 4 1 1 1	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347 1.264 0.4004 0.3341 <b>Rep 2</b> 1 1 1	0.763 0 0 <b>95% LCL</b> 1.304 1.441 1.16 1.034 0.1262 -0.05069 <b>Rep 3</b> 0.9333 1 0.8667	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494 0.6745 0.7189 <b>Rep 4</b> 1 1	0.9 0.1333 0.06667 <b>Median</b> 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%
19 38 75 150 Angular (Corr C-μg/L 0 10 19 38 75 150 7d Survival R C-μg/L 0 10 19 38.	Control Type Negative Contr ate Detail Control Type	4 4 4 <b>Count</b> 4 4 4 4 4 4 4 4 1 1 1 1 0.8667	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347 1.264 0.4004 0.3341 <b>Rep 2</b> 1 1 1 1 0.9333	0.763 0 0 <b>95% LCL</b> 1.304 1.441 1.16 1.034 0.1262 -0.05069 <b>Rep 3</b> 0.9333 1 0.8667 0.8	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494 0.6745 0.7189 <b>Rep 4</b> 1 1 0.9333 1	0.9 0.1333 0.06667 <b>Median</b> 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%
19 38 75 150 Angular (Corr C-μg/L 0 10 19 38 75 150 7d Survival R C-μg/L 0 10 19	Control Type Negative Contr ate Detail Control Type	4 4 4 <b>Count</b> 4 4 4 4 4 4 4 1 1 1	0.9 0.1667 0.1333 <b>Mean</b> 1.408 1.441 1.347 1.264 0.4004 0.3341 <b>Rep 2</b> 1 1 1	0.763 0 0 <b>95% LCL</b> 1.304 1.441 1.16 1.034 0.1262 -0.05069 <b>Rep 3</b> 0.9333 1 0.8667	1 0.3698 0.4206 <b>95% UCL</b> 1.513 1.442 1.535 1.494 0.6745 0.7189 <b>Rep 4</b> 1 1 0.9333	0.9 0.1333 0.06667 <b>Median</b> 1.441 1.441 1.375 1.253 0.3624	0.8 0.06667 0 <u>Min</u> 1.31 1.441 1.197 1.107 0.2612	1 0.3333 0.4 Max 1.441 1.441 1.441 1.441 1.441 0.6155	0.04303 0.06383 0.09027 <b>Std Err</b> 0.03292 0 0.05894 0.07224 0.08614	76.59% 135.4% CV% 4.68% 0.0% 8.75% 11.43% 43.03%	83.05% 86.44% %Effec 0.0% -2.34% 4.34% 10.27% 71.57%

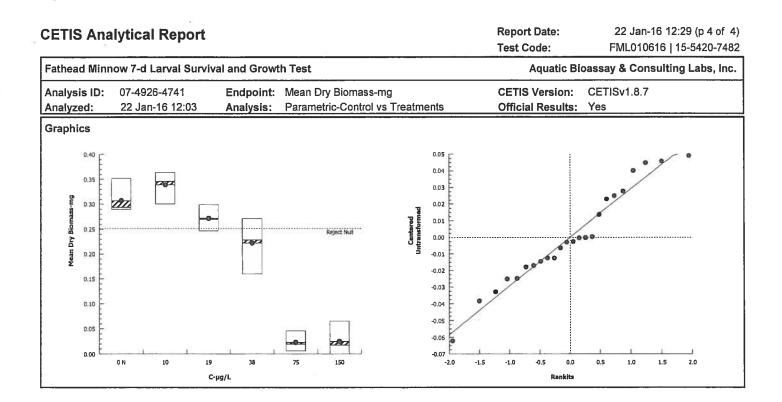
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CETIS™ v1.8.7.11



Analyst:_____QA:___P

	alytical Repo	rt					•	ort Date: Code:		an-16 12:2 )10616   15	
Fathead Min	now 7-d Larval Su	ırvival and	Growth Tes	st				Aquatic E	Bioassay & C	onsulting	Labs, In
Analysis ID:	07-4926-4741	End	point: Mea	n Dry Biom	ass-mg		CET	S Version:	CETISv1.	8.7	
Analyzed:	22 Jan-16 12:03	B Ana	lysis: Para	ametric-Con	trol vs Trea	tments	Offic	ial Results	: Yes		
Data Transfo	rm	Zeta	Alt Hyp	Trials	Seed		PMSD	NOEL	LOEL	TOEL	TU
Untransforme		NA	C > T	NA	NA		18.1%	19	38	26.87	
Dunnett Mult	iple Comparison	Test									
Control	vs C-µg/L		Test Stat	Critical	MSD DF	P-Value	P-Type	Decision	(α:5%)		
Negative Con		 -	-1.382	2.407	0.055 6	0.9941	CDF	-	ificant Effect		
guille	19		1.548	2.407	0.055 6	0.2128	CDF	-	ificant Effect		
	38*		3.69	2.407	0.055 6	0.0036	CDF	Significan			
	75*		12.34	2.407	0.055 6	<0.0001	CDF	Significan			
	150*		12.24	2.407	0.055 6	< 0.0001	CDF	Significan			
ANOVA Table	)										
Source	Sum Squa	res	Mean Squ	are	DF	F Stat	P-Value	Decision	(α:5%)		
Between	0.393124		0.0786248		5	74.08	<0.0001	Significar			
Error	0.0191035	5	0.0010613	09	18			-			
Total	0.4122276				23						
Distributiona	I Tests										
Attribute	Test			Test Stat	Critical	P-Value	Decision	(α:1%)			
Variances	Bartlett Ec	uality of Va	ariance	4.842	15.09	0.4355	Equal Var	iances			
Variances	Mod Leve	ne Equality	of Variance	2.038	4.248	0.1215	Equal Var	iances			
Variances	Levene Ec	quality of Va	ariance	3.29	4.248	0.0277	Equal Variances				
Distribution	Shapiro-W	/ilk W Norn	nality	0.9624	0.884	0.4885	Normal Distribution				
Distribution	Kolmogor	ov-Smirnov	D	0.1621	0.2056	0.1030	Normal D	istribution			
Distribution	D'Agostine	Skewnes	5	0.1823	2.576	0.8553	Normal D	istribution			
Distribution	D'Agostine	o Kurtosis		0.2462	2.576	0.8055	Normal D	istribution			
Distribution	D'Agostine	o-Pearson I	K2 Omnibus	0.09388	9.21	0.9541	Normal Distribution				
Distribution	Anderson	Darling A2	Normality	0.4278	3.878	0.3163	Normal D	istribution			
Mean Dry Bio	omass-mg Summ	ary									
C-µg/L	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effec
0	Negative Control	4	0.3072	0.2595	0.3549	0.2937	0.2893	0.352	0.01498	9.76%	0.0%
10		4	0.339	0.2951	0.3829	0.3457	0.3007	0.364	0.01379	8.14%	-10.36%
19		4	0.2715	0.2371	0.3059	0.27	0.2467	0.2993	0.0108	7.96%	11.61%
38		4	0.2222	0.1328	0.3115	0.2287	0.16	0.2713	0.02808	25.28%	27.67%
75		4	0.023	-0.003914	0.04991	0.02	0.006	0.046	0.008457	73.54%	92.51%
150		4	0.02517	-0.01993	0.07026	0.01767	0	0.06533	0.01417	112.6%	91.81%
Mean Dry Bio	omass-mg Detail										
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4		<u></u>				
0	Negative Control	0.352	0.2893	0.2927	0.2947						
10		0.3387	0.3527	0.3007	0.364						
19		0.2713	0.2993	0.2467	0.2687				,		
38		0.1893	0.2713	0.16	0.268						
75		0.006	0.01667	0.046	0.02333						
		0	0.06533	0.02267	0.01267						



CETIS	S Analy	vtical Repo	rt		· · · · · · ·			•	ort Date: Code:			2:29 (p 1 of 3) 15-5420-7482
Fathea	d Minno	w 7-d Larval Su	urvival and	Growth	Test				Aquatic B	ioassay & (	Consulti	ng Labs, Inc.
Analysi	is ID:	04-8272-9535	End		7d Survival Rat	-		CETI	S Version:	CETISv1	.8.7	
Analyze	ed:	22 Jan-16 12:03	Ana	ysis:	Linear Interpola	tion (ICPIN	)	Offic	Yes			
Linear	Interpola	ation Options										
X Trans	sform	Y Transform	See	di l	Resamples	Exp 95%	CL Met	hođ				
Linear		Linear	0	:	280	Yes	Two	-Point Interp	olation			
Point E	stimates	\$										
Level	µg/L	95% LCL	95% UCL									
EC5	22.01	10.58	49.41									<u></u>
EC10	38.38	17.51	43.26									
EC15	40.88	33.77	45.38									
EC20	43.38	38.19	47.65									
EC25	45.88	41.06	50.1									
EC40	53.39	49.14	58.09									
EC50	58.39	54.31	64.09									
7d Sur	vival Rat	e Summary				Calcu	lated Vari	ate(A/B)				
C-µg/L	Co	ontrol Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	В
0	Ne	gative Control	4	0.9833	0.9333	1	0.01667	0.03333	3.39%	0.0%	59	60
10		1340	4	1	1	1	0	0	0.0%	-1.7%	60	60
19			4	0.95	0.8667	1	0.03191	0.06383	6.72%	3.39%	57	60
38			4	0.9	0.8	1	0.04303	0.08607	9.56%	8.48%	54	60
75			4 4	0.1667		0.3333 0.4	0.06383	0.1277	76.59%	83.05%	10	60 60
150			4	0.1333	0	0.4	0.09027	0.1805	135.4%	86.44%	8	60
7d Sur	vival Rat	e Detail										
C-µg/L		ntrol Type	Rep 1	Rep 2	Rep 3	Rep 4						
0	Ne	gative Control	1	1	0.9333	1						
10			1	1	1	1						
19			1	1	0.8667	0.9333						
38			0.8667	0.9333		1						
75			0.06667	0.0666		0.2						
150			0	0.4	0.06667	0.06667						
7d Sur	vival Rat	e Binomials										
C-µg/L		Control Type	Rep 1	Rep 2	Rep 3	Rep 4						
0	N	legative Control		15/15	14/15	15/15						
10			15/15	15/15	15/15	15/15						
19			15/15	15/15	13/15	14/15						
38			13/15	14/15	12/15	15/15						
75			1/15	1/15	5/15	3/15						
150			0/15	6/15	1/15	1/15						

QA:_____ Analyst:

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CETIS Ana	alytical Report			Report Date: Test Code:	22 Jan-16 12:29 (p 2 of 3 FML010616   15-5420-748				
Fathead Minr	now 7-d Larval Surviv	al and Growt	h Test	Aquatic Bioassay & Consulting Labs					
Analysis ID: Analyzed:	04-8272-9535 22 Jan-16 12:03	Endpoint: Analysis:	7d Survival Rate Linear Interpolation (ICPIN)	CETIS Version: Official Results:	CETISv1.8.7 Yes				
Graphics 1.0 0.9 0.8 0.7 0.5 0.5 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	•••				2				
0.3 0.2 0.1 0.0 0	20 40 60 С-ня		120 140 160						

Analyst:____

P QA:

CETIS	Analy	vtical Repo	ort						-	ort Date: Code:		In-16 12:29 (p 3 of 10616   15-5420-74
Fathead	d Minno	w 7-d Larval S	urvival and	Growt	h Test					Aquatic B	ioassay & Co	onsulting Labs, Ir
Analysi Analyze		06-4915-6096 22-Jan-16 12:0		lpoint: lysis:		Biomass-mg rpolation (ICP	IN)			S Version:	CETISv1.8 Yes	.7
Linear I	Interpola	ation Options										
X Trans		Y Transform	see	d	Resample	s Exp 98	5% CL	Meth	od			
Linear		Linear		4893	280	Yes			Point Interp	olation		
Point E	stimates	5		(C. = 1				-				
Level	µg/L	95% LCL	95% UCL									
IC5	12.82	10.73	17.21									
IC10	15.64	12.51	24.11									
IC15	18.46	13.88	35.55									
IC20	24.02	13.53	49.02									
IC25	30.24	15.5	49.09									
IC40	43.29	28.44	53.89									
IC50	49.32	35.59	58.4									
Mean D	ry Biom	ass-mg Summ	ary				Calcula	ted Va	riate			
C-µg/L		ntrol Type	Count	Mean	Min	Мах		d Err	Std Dev	CV%	%Effect	
0	Ne	gative Control	4	0.307				1498	0.02997	9.76%	0.0%	
10			4	0.339				1379	0.02758	8.14%	-10.36%	
19			4	0.271				108	0.0216	7.96%	11.61%	
38			4	0.222		0.2713		2808	0.05616	25.28%	27.67%	
75			4	0.023				08457	0.01691	73.54%	92.51%	
150			4	0.025	17 0	0.06533	3 0.0	1417	0.02834	112.6%	91.81%	
		ass-mg Detail										
C-µg/L		ntrol Type	Rep 1	Rep 2								
0	Ne	gative Control	0.352	0.289								
10			0.3387	0.352								
19			0.2713	0.299								
38			0.1893	0.271		0.268						
75			0.006	0.016								
150			0	0.065	33 0.022	67 0.01267	/					
Graphic	s											
	0.35 -											
	1											
	0.30	1.										
	È	à										
Ę	0.25											
285 TH	0.20	٩										
, pi	Ē	$\sim$										
Mean Dry Biomass-mg	0.15											
Me	Ē	1										
	0.10		/									
			$\backslash$				•					
	0.05				0							
	0.00 E					<u></u>						
	0	20 40	60 80 Curr 11	100	120 140	160						
			C-µg/L									

Analyst:__

QA:_P

CETIS Measurement Report									Report Date:         22 Jan-16 12:29 (p 1 of           Test Code:         FML010616   15-5420-74					
Fathead Minnow 7-d Larval Survival and Growth Test								Aquatic Bioassay & Consulting Labs, Inc.						
Batch ID:	05-3787-4752		Test Type: Growth-Survival (7d)					Analyst:						
Start Date:	06 Jan-16 13:50 Protocol:			EPA/821/R-02-013 (2002)				Diluent: Laboratory Water						
Ending Date:				Pimephales pro				Brine: Not Applicable						
Duration:	6d 22h Source			Aquatic Biosys		Age:								
Sample ID:	12-7379-3699		Code: FML010616					Client: ABC Labs						
Sample Date:	06 Jan-16 13:50 Material:		Copper chloride				Project: REI	F TOX						
Receive Date:	Source:			Reference Toxicant										
Sample Age:	NA Statio			REF TOX										
Alkalinity (Ca	CO3)-mg/L													
C-µg/L	Control Type	Count	Mean	95% LCL	95% UCL	Min	Мах	Std Err	Std Dev	CV%	QA Cour			
0	Negative Contr	8	64.13	61.25	67	60	68	1.217	3.441	5.37%	0			
150		8	74	74	74	74	74	0	0	0.0%	0			
Overall		16	69.06			60	74				0 (0%)			
Conductivity-	umhos													
	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Cour			
0	Negative Contr		328.4	326	330.8	323	332	1.017	2.875	0.88%	0			
10		8	329	314.4	343.6	295	350	6.159	17.42	5.3%	0			
19		8	322.8	315.4	330.1	308	332	3.098	8.763	2.72%	0			
38		8	323.1	317.2	329	307	328	2.496	7.06	2.19%	0			
75		8	318	302.1	333.9	271	327	6.743	19.07	6.0%	0			
150	94 - WN - 24	8	324.8	323.4	326.1	322	327	0.559	1.581	0.49%	0			
Overall		48	324.3			271	350				0 (0%)			
Dissolved Oxy		-									•• -			
	Control Type	Count		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Cour			
	Negative Contr		8.1	7.686	8.514	7.7	9.2	0.1753	0.4957	6.12%	0			
10		8	8.5	7.928	9.072	7.8	9.7	0.242	0.6845	8.05%	0			
19		8	8.55	7.955	9.145	7.7	9.7	0.2514	0.7111	8.32%	0			
38		8	8.6	8.007	9.193	7.7	9.8	0.2507	0.7091	8.25%	0			
75		8	8.588	8.006	9.169	7.7	9.8	0.246	0.6958	8.1%	0			
150		8	8.563	8.017	9.108	7.7	9.6	0.2306	0.6523	7.62%	0			
Overall		48	8.483			7.7	9.8				0 (0%)			
Hardness (Ca		_							<b>•</b> · · -					
	Control Type	Count		95% LCL		Min	Max	Std Err	Std Dev	CV%	QA Cour			
	Negative Contr		92.13	88.68	95.57	88	97	1.457	4.121	4.47%	0			
150 Overall		8	99	99	99	99	99	0	0	0.0%	0			
Overall		16	95.56			88	99				0 (0%)			
pH-Units	Operation Trees	0		050/ 1.01		Mir.			Old Davi	C)/8/	04.0			
С-µg/L	Control Type Negative Contr	Count	8.025	95% LCL 7.803	95% UCL 8.247	Min 7.6	<u>Max</u> 8.3	Std Err 0.09402	Std Dev 0.2659	CV% 3.31%	QA Cour 0			
10	Negative Colli	8	7.725	7.526	7.924	7.4	8	0.08399	0.2375	3.08%	0			
19		8	7.763	7.608	7.924	7.5	8	0.06529	0.1847	2.38%	0			
38		о 8	7.788	7.643	7.932	7.5 7.5	8	0.06105	0.1847	2.38%	0			
30 75		8	7.775	7.643	7.907	7.5	o 7.9	0.05105	0.1581	2.22%	0			
75 150		8	7.763	7.637	7.888	7.5	7.9	0.0539	0.1501	2.03 <i>%</i> 1.94%	0			
100		U	1.103	1.001	1.000	1.0	1.3	0.00024	0.1000	1.04/0	v			

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CETIS™ v1.8.7.11

Analyst:_____QA:___P

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CETIS Measurement Report								Report Date: Test Code:		22 Jan-16 12:29 (p 2 of 2) FML010616   15-5420-7482			
Fathead Minnow 7-d Larval Survival and Growth Test								Aquatic			g Labs, Inc.		
Temperat	ure-°C								·				
C-µg/L	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count		
0	Negative Contr	8	24.08	23.9	24.25	24	24.6	0.075	0.2121	0.88%	0		
10	· ·	8	24.1	23.86	24.34	24	24.8	0.1	0.2828	1.17%	0		
19		8	24.1	23.9	24.3	24	24.7	0.0866	0.2449	1.02%	0		
38		8	24.08	23.93	24.22	24	24.5	0.06196	0.1752	0.73%	0		
75		8	24.01	23.98	24.04	24	24.1	0.01249	0.03531	0.15%	0		
150 Overall		8 48	24.04	23.99	24.08	24 24	24.1 24.8	0.01827	0.05167	0.22%	0		
Overall	(0-002)	40	24.07				24.0				0 (0%)		
	(CaCO3)-mg/L	4	2	2	4	-	c	7	0				
C-µg/L	Control Type	<u>    1                                </u>	2	3	4	5	6	7 60	<b>8</b> 60				
0 150	Negative Contr		68	68	63 74	63 74	63 74		60 74				
	it	74	74	74	74	74	74	74	/4				
	/ity-µmhos		2	2		6	c	7	0				
С-µg/L 0	Control Type Negative Contr	1	2	3	4	5 330	6	7	<u>8</u> 331	<u> </u>			
10	Negative Contr	328 321	332 295	323 350	328 348	330 338	326 327	329 325	328				
19		322	308	325	348 330	332	326	325	328				
38		320	308	326	330 327	328	326	323	328				
75		320	271	325	326	325	325	323	328				
150	-*	322	325	323	325	325	326	325	327				
		522	525	525	525	525			527				
	l Oxygen-mg/L	4	2	2		F	c	7	0				
С-µg/L 0	Control Type Negative Contr	1 7.8	<b>2</b> 8.4	<b>3</b> 7.7	4 7.8	5 7.9	<u>6</u> 7.9		<u>8</u> 9.2				
10	Megative Conti	8.6	9.7	7.9	7.8	7.8	8.5	9.2	9.2 8.5				
19		8.6	9.7	7.8	7.9	7.7	8.8	9.2	8.7				
38		8.7	9.8	8	7.9	7.7	8.8	9.2	8.7				
75		8.6	9.8	8.1	7.9	7.7	. 8.6	9.2	8.8				
150		8.7	9.6	8.2	7.8	7.7	8.7	9.2	8.6				
	(CaCO3)-mg/L		0.0					0.12	0.0				
C-µg/L	Control Type	1	2	3	4	5	6	7	8		75		
0	Negative Contr		97	97	90	90	90	88	88				
150		99	99	99	99	99	99	99	99				
pH-Units		· · · · ·		····									
C-μg/L	Control Type	1	2	3	4	5	6	7	8				
0	Negative Contr		7.9	7.7	8.3	8.1	8.2	7.6	8.3				
10	Ū	7.4	7.4	7.9	7.9	7.9	8	7.6	7.7				
19	(1944) (C. (1944)	7.5	7.6	7.9	7.9	7.9	8	7.6	7.7				
38		7.5	7.7	7.9	8	7.9	7.9	7.6	7.8				
75		7.5	7.7	7.9	7.9	7.9	7.9	7.6	7.8				
150		7.5	7.7	7.8	7.9	7.9	7.9	7.6	7.8				
Temperat	ure-°C							,					
C-µg/L	Control Type	1	2	3	4	5	6	7	8				
0	Negative Contr	24	24	24	24	24	24	24.6	24				
10		24	24	24	24	24	24	24.8	24				
19	330 NO	24	24	24	24	24.1	24	24.7	24				
38		24	24	24	24	24.1	24	24.5	24				
75		24	24	24	24	24.1	24	24	24				
150		24	24	24	24	24.1	24.1	24.1	24				

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CETIS™ v1.8.7.11

Analyst: _____ QA:____



## CHRONIC CERIODAPHNIA SURVIVAL AND REPRODUCTION BIOASSAY

DATE:

5 January- 2016

# STANDARD TOXICANT: Copper Chloride

ENDPOINT: SURVIVAL

NOEC = 10.00 ug/l

EC25 = 14.29 ug/l EC50 = 21.43 ug/l

ENDPOINT: REPRODUCTION

NOEC = 10.00 ug/l

IC25 = 10.55 ug/l IC50 = 17.36 ug/l

Yours very truly,

Scott Johnson Laboratory Director

CETIS Summ	nary Repor	t					Report Date Test Code:	e:		Jan-16 14:4 010516   16	
Ceriodaphnia 7-	d Survival and	Reproduction	Test				Aqua	tic Bio	assay & (	Consulting	Labs, Inc
Start Date: 0	4-6650-7256 5 Jan-16 12:00 2 Jan-16 11:00	Test Type Protocol: Species:	EPA/821/F	eproduction-Survival (7d) PA/821/R-02-013 (2002) eriodaphnia dubia			Analyst: Diluent: Laboratory Water Brine: Not Applicable				
•	d 23h	Source:		osystems, CO			Age:	NOLAP	plicable		
•	3-1381-7155	Code:	CER01051				Client:	Interna	al Lab		
Sample Date: 0	5 Jan-16 12:00	Material:	Copper ch				Project:				
Receive Date:	•	Source:	Reference	Toxicant							
Sample Age: N	A	Station:	REF TOX								
Comparison Sur	nmary										
•	ndpoint	NO	LOEL		PMSD	TU	Meth				
	d Survival Rate		30	17.32	NA					ni-Holm Te	st
06-7842-3993 R	eproduction	10	30	17.32	21.6%		Steel	Many-	One Rank	Sum Test	
Point Estimate S	-										
	ndpoint	Lev	10	95% LCL		τU	Meth		alat's th		
15-4141-4292 7	a Survival Rate			5.833	11.43		Linea	ar Interp	olation (I	CPIN)	
		EC1 EC1		6.667	12.86						
		EC1			14.29 16.67						
		EC2		-	18.33						
		EC2			23.33						
5 9. SP20		ECS			26.67						
12-5136-4443 R	eproduction	IC5	6.088		7.629		Linea	r Intern	olation (I		
2		IC10			10.39					,	
		IC1			11.51						
		IC20	9.352	7.578	12.63						
		IC2	5 10.55	8.223	13.75						
		IC40	) 14.64	10.55	17.15						
		IC50	) 17.36	14.14	19.36						
Test Acceptabili	ty										
						TAC Limits			Decision		
	d Survival Rate			1	0.8 - NL					cceptability	
17-7157-2608 7			trol Resp	1	0.8 - NL		Yes Passes Acceptab				
	eproduction		trol Resp	30.9 30.9	15 - NL		Yes				
	•		Control Resp PMSD		15 - NL		Yes				
06-7842-3993 R		Pivis		0.2162	0.13 - 0.4	/	Yes	1	Passes A	cceptability	Criteria
7d Survival Rate C-μg/L Cα	-	Count Mea	n 95% l	LCL 95% UCL	Min	Max	Std E	Frr 9	Std Dev	CV%	%Effe
	egative Control		1	1	1	1	0			0.0%	0.0%
3	-En 1101221012-01	10 1	1	1	1	1	0		5	0.0%	0.0%
5		10 1	1	1	1	1	0		5	0.0%	0.0%
10		10 0.9	0.673	8 1	0	1	0.1		0.3162	35.14%	10.0%
30		10 0.2	0	0.5016	0	1	0.133	33 (	0.4216	210.8%	80.0%
50		10 0	0	0	0	0	0	(	DC		100.0%
Reproduction Su	-										
		Count Mea				Max			Std Dev	CV%	%Effe
	egative Control				27	36	1.038		3.281	10.62%	0.0%
3		10 33.1			15	41	2.554		B.075	24.4%	-7.12%
5		10 36.1			22	48	2.957		9.351	25.9%	-16.83
10		10 25.7			13	39	2.422		7.66	29.81%	16.83%
30 50		10 1.2 10 0	-0.182 0	22 2.582 0	0 0	4 0	0.611 0		1.932 D	161.0%	96.12% 100.0%
							0				- 1 D D D P

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Analyst:_____ QA:______

## **CETIS Summary Report**

**Report Date:** Test Code:

21 Jan-16 14:40 (p 2 of 2)

CER010516 | 16-9645-7640

Ceriodaphnia 7-d Survival and Reproduction Test

Aquatic Bioassay & Consulting Labs, Inc.

7d Surviva	I Rate Detail										
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Control	1	1	1	1	1	1	1	1	1	1
3		1	1	1	1	1	1	1	1	1	1
5		1	1	1	1	1	1	1	1	1	1
10		1	1	1	1	1	1	1	1	1	0
30		0	0	0	0	1	0	0	1	0	0
50		0	0	0	0	0	0	0	0	0	0
Reproduct	ion Detail		· · · · ·								
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Control	29	29	36	36	28	27	31	30	34	29
3	7	29	40	33	29	2 <del>9</del>	40	41	15	40	35
5		22	44	44	43	36	22	39	35	48	28

## 7d Survival Rate Binomials

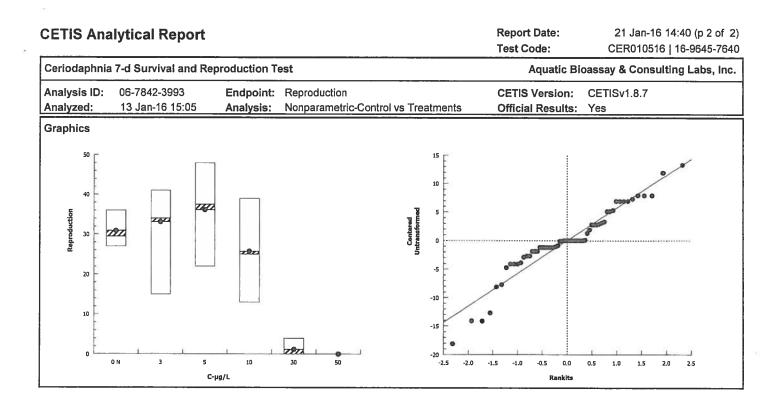
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
3		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
5		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
10		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	0/1
30		0/1	0/1	0/1	0/1	1/1	0/1	0/1	1/1	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

000-055-186-3

Analyst:_____QA:___

	lytical Repo							Test	Code:	CERO	010516   16	3-9645-764
Ceriodaphnia	7-d Survival and	Reprod	uction Test				_	24	Aquatic E	Bioassay & C	onsulting	J Labs, Inc
Analysis ID: Analyzed:	06-7842-3993 13 Jan-16 15:05		• •	production	Control vs	s Tr	eatments		S Version:		8.7	
Data Transfor	m	Zeta	Alt Hyp	Trials	Seed			PMSD	NOEL	LOEL	TOEL	TU
Untransformed	· · · · · · · · · · · · · · · · · · ·	NA	C > T	NA	NA			21.6%	10	30	17.32	
Steel Many-O	ne Rank Sum Te	st										
Control	vs C-µg/L		Test Stat	Critical	Ties D	)F	P-Value	P-Type	Decision	(α:5%)		
Negative Cont			120.5	76	1 1	8	0.9871	Asymp		ificant Effect		
	5		123.5	76	3 1	8	0.9938	Asymp	-	ificant Effect		
	10		82.5	76			0.1302	Asymp	-	ificant Effect		
	30*		55	76			0.0003	Asymp	Significan			
ANOVA Table												
Source	Sum Squa	res	Mean Squ	are	DF		F Stat	P-Value	Decision	(α:5%)		
Between	7897.6		1974.4		4		43.72	<0.0001	Significan	t Effect		
Error	2032.4	<u>.</u>	45.16444		45							
Total	9930				49							
Distributional	Tests											
Attribute	Test			Test Stat	Critical		P-Value	Decision	a:1%)			
Variances	Bartlett Ec	uality of V	/ariance	22.73	13.28		0.0001	Unequal \	/ariances			
Variances	Mod Leve	ne Equalit	ty of Variance	4.536	3.767		0.0037	Unequal V	/ariances			
Variances	Levene Ec	uality of V	Variance	4.477	3.767		0.0039	Unequal \	/ariances			
Distribution	Shapiro-W	/ilk W No	mality	0.954	0.9367		0.0500	Normal D	stribution			
Distribution	Kolmogore			0.1222	0.1453		0.0598	Normal D	stribution			
Distribution	D'Agostine	Skewne	SS	1.716	2.576		0.0862	Normal D	stribution			
Distribution	D'Agostine			1.269	2.576		0.2046	Normal D	stribution			
Distribution	D'Agostine	-Pearson	K2 Omnibus	4.553	9.21		0.1026	Normal D	stribution			
Distribution	Anderson-	Darling A	2 Normality	0.8851	3.878		0.0235	Normal D	stribution			
Reproduction	Summary											
C-µg/L	Control Type	Count	Mean	95% LCL	95% UC	L	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	10	30.9	28.55	33.25		29.5	27	36	1.038	10.62%	0.0%
3		10	33.1	27.32	38.88		34	15	41	2.554	24.4%	-7.12%
5		10	36.1	29.41	42.79		37.5	22	48	2.957	25.9%	-16.83%
10		10	25.7	20.22	31.18		25	13	39	2.422	29.81%	16.83%
30		10	1.2	-0.1822	2.582		0	0	4	0.611	161.0%	96.12%
50		10	0	0	0		0	0	0	0		100.0%
Reproduction	Detail											
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	_	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Negative Control	29	29	36	36		28	27	31	30	34	29
3		29	40	33	29		29	40	41	15	40	35
5		22	44	44	43		36	22	39	35	48	28
10		23	3 <del>9</del>	27	18		33	21	29	31	23	13
30		0	0	0	0		4	4	0	4	0	0
				0	0		0	0	0			0

Analyst: _____ QA:____



QA: P Analyst:__

CETIS Analytical Report							ort Date: Code:			40 (p 1 of 3) 6-9645-7640		
Cerioda	aphnia	7-d Survival and	d Reprodu	ction T	est				Aquatic B	ioassay &	Consulting	g Labs, Inc.
Analysi	is ID:	15-4141-4292	End	point:	7d Survival Rat	e		CET	'IS Version:	CETISv1	.8.7	
Analyz	ed:	13 Jan-16 15:05	5 Ana	lysis:	Linear Interpola	ation (ICPII	N)	Offi	cial Results:	Yes		
Linear	Interpo	lation Options										
X Trans	sform	Y Transform	See	d	Resamples	Exp 95%	CL M	ethod				
Linear		Linear	0		280	Yes	Tv	vo-Point Interp	olation			
Point E	stimat	es										
Level	µg/L	95% LCL	95% UCL									
EC5	7.5	5.833	11.43									
EC10	10	6.667	12.86									
EC15	11.43	7.5	14.29									
EC20	12.86	8.333	16.67									
EC25	14.29	9.167	18.33									
EC40	18.57	13.33	23.33									
EC50	21.43	16.67	26.67									
7d Surv	vival Ra	ate Summary			_	Calc	ulated Va	riate(A/B)				
C-µg/L	С	ontrol Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	Α	в
0	N	legative Control	10	1	1	1	0	0	0.0%	0.0%	10	10
3			10	1	1	1	0	0	0.0%	0.0%	10	10
5			10	1	1	1	0	0	0.0%	0.0%	10	10
10			10	0.9	0	1	0.1	0.3162	35.14%	10.0%	9	10
30			10	0.2	0	1	0.1333	0.4216	210.8%	80.0%	2	10
50			10	0	0	0	0	0		100.0%	0	10
7d Surv	vival Ra	ate Detail										
C-µg/L	С	ontrol Type	Rep 1	Rep 2	2 Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	N	legative Control	1	1	1 8	1	1	1	1	1	1	1
3			1	1	1	1	1	1	1	1	1	1
5			1	1	1	1	1	1	1 🔐	1	1	1
10			1	1	1	1	1	1	1	1	1	0
30			0	0	0	0	1	0	0	1	0	0
50			0	0	0	0	0	0	0	0	0	0
7d Surv	vival Ra	ate Binomials										
C-µg/L		Control Type	Rep 1	Rep 2	2 Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
_	0	Negative Control	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0			A 14	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
0 3			1/1									
			1/1 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	1/1 0/1
3 5			1/1	1/1	1/1	1/1						

CETIS Ana	alytical Report			Report Date: Test Code:	21 Jan-16 14:40 (p 2 of 3) CER010516   16-9645-7640
Ceriodaphnia	7-d Survival and Re	eproduction T	est	Aquatic Bi	oassay & Consulting Labs, Inc.
Analysis ID: Analyzed:	15-4141-4292 13 Jan-16 15:05	Endpoint: Analysis:	7d Survival Rate Linear Interpolation (ICPIN)	CETIS Version: Official Results:	CETISv1.8.7 Yes
Graphics					
0.9 0.8 0.7 0.5 P 0.4 0.3 0.2 0.2	*				а

Analyst:_____ QA:____

CETIS	S Anal	ytical Repo	ort						ort Date: Code:			40 (p 3 of 3) 6-9645-7640
Ceriod	aphnia	7-d Survival an	d Reprodu	ction Te	est				Aquatic B	ioassay &	Consulting	g Labs, Inc.
Analys Analyz		12-5136-4443 13 Jan-16 15:0		lpoint: lysis:	Reproduction Linear Interpo	lation (ICPI	N)		IS Version: ial Results:	CETISv1 Yes	.8.7	E.
Linear	Interpo	ation Options										
X Trans		Y Transform	n See	d	Resamples	Exp 95	% CL Met	hod				
Linear		Linear		6062	280	Yes		-Point Interp	olation			
Point E	Eștimate	S				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·				
Level	µg/L	95% LCL	95% UCL									
IC5	6.088	4.573	7.629									
IC10	7.176	6.184	10.39									
IC15	8.264	6.843	11.51									- 63 -
IC20 IC25	9.352 10.55	7.578 8.223	12.63 13.75									
IC25	10.55	8.223 10.55	13.75			20						
IC50	17.36	14.14	19.36									
Reproc	luction	Summary				с	alculated Va	riate				
C-µg/L		ontrol Type	Count	Mean	Min	Max	Std Err	Std Dev	CV%	%Effect	e	
0		egative Control	10	30.9	27	36	1.038	3.281	10.62%	0.0%		
3			10	33.1	15	41	2.554	8.075	24.4%	-7.12%		
5			10	36.1	22	48	2.957	9.351	25.9%	-16.83%		
10			10	25.7	13	39	2.422	7.66	29.81%	16.83%		
30 50			10 10.	1.2 0	0 0	4 0	0.611 0	1.932 0	161.0%	96.12% 100.0%		
	luction	Detail					•					
C-µg/L		ontrol Type	Rep 1	Pan 2	Rep 3	Pop 4	Pop 5	Pop 6	Bop 7	Bon 9	Bop 0	Pop 10
0		egative Control	29	Rep 2 29	36	Rep 4 36	Rep 5 28	Rep 6	Rep 7 31	Rep 8 30	Rep 9 34	Rep 10 29
3		sguare control	29	40	33	29	29	40	41	15	40	35
5			22	44	44	43	36	22	39	35	48	28
10			23	39	27	18	33	21	29	31	23	13
30			0	0	0	0	4	4	0	4	0	0
50			0	0	0	0	0	0	0	0	0	0
Graphi	cs					· · · · · · · · · · · · · · · · · · ·					·······	
Raarroduction	40 35 20 10 5 0 0	10	20 С-µg/L	<b>2</b>	- 1 0 40 S0							72 *

P Analyst:_____QA:__

Ceriodaphnia 7-0	d Survival and	Reproduc	tion Test					Aquatic			3-9645-7640 Labs, Inc.
-	7-7157-2608 3 Jan-16 15:05		point: 7d S		e igency Table			S Version al Results		1.8.7	
	5 581-10 15.00		•								<b>T</b> U
Data Transform Untransformed		Zeta	Alt Hyp C > T	Trials NA	Seed NA			<b>NOEL</b> 10	LOEL 30	TOEL 17.32	TU
			021				· · · · · · · · · · · · · · · · · · ·	10		17.52	
Fisher Exact/Bor	nferroni-Holm	Test				•					
Control vs			Test Stat		P-Type	Decision					
Negative Control	3		1	1.0000	Exact	-	ficant Effect				
	5 10		1 0.5	1.0000 1.0000	Exact Exact	-	ficant Effect ficant Effect				
	30		0.0003572		Exact	Significan					
	50		5.413E-06		Exact	Significan					
Data Summary					······································						
-	ntrol Tune	NR		NR + R	Dren ND	Prop R	%Effect				
	ontrol Type	10	R 0	10	Prop NR 1	0	0.0%				
3	gaave oond	10	0	10	1	0	0.0%				
5		10	0	10	1	0	0.0%				
10		9	1	10	0.9	0.1	10.0%				
30		2	8	10	0.2	0.8	80.0%				
50		0	10	10	0	1	100.0%	<u></u>		· · · · · · · · · · · · · · · · · · ·	
7d Survival Rate	Detail										
C-µg/L Co	ontrol Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
	egative Control	1	1	1	1	1	1	1	1	1	1 ×
3		1	1	1	1	1	1	1	1	1	1
5		1	1	1	1	1	1	1	1	1	1
10 30		1 0	1 0	1 0	1 0	1 1	1 0	1 0	1	1 0	0 0
50		0	0	0	0	0	0	0	0	0	0
				•		•	0	·····			
7d Survival Rate	Binomials										
	ontrol Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
	egative Control		1/1 🔬	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
3 5		1/1 1/1	1/1 1/1	1/1 1/1	1/1 1/1	1/1 1/1	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	0/1
30		0/1	0/1	0/1	0/1	1/1	0/1	0/1	1/1	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
Graphics											
1.0 E	0	•									
0.9			•								
0.8											
7d Surry Rate 9.0 2.1					1						
LD STORE											
0.4											
0.3											
0.2			•								
0.1											
0.0 E		t		1.0	_						
0 N	3	5 C-µg/L	10 30	50							
		- hair									

CETIS Mea	Isurement I	Repo	rt					Report Date: Test Code:			:40 (p 1 of 2) 16-9645-7640
Ceriodaphnia	7-d Survival an	id Repi	oduction T	est				Aquatic	Bioassay &	Consultin	g Labs, Inc.
Batch ID:	14-6650-7256		Test Type:	Reproduction-	Survival (7d)			Analyst:			
Start Date:	05 Jan-16 12:0	0	Protocol:	EPA/821/R-02	-013 (2002)			Diluent: Lat	oratory Wa	ter	
Ending Date:	12 Jan-16 11:0	0	Species:	Ceriodaphnia d	lubia			Brine: Not	Applicable		
Duration:	6d 23h		Source:	Aquatic Biosys	tems, CO			Age:			
Sample ID:	13-1381-7155		Code:	CER010516				Client: Inte	ernal Lab		
Sample Date:	05 Jan-16 12:0	0	Material:	Copper chlorid	e			Project:			
Receive Date:			Source:	Reference Tox	icant						
Sample Age:	NA		Station:	REF TOX							
Alkalinity (Ca	CO3)-mg/L										
C-µg/L	Control Type	Coun	t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	65.5	63.27	67.73	63	68	0.9449	2.673	4.08%	0
50		5	60	60	60	60	60	0	0	0.0%	0
Overall		13	62.75			60	68				0 (0%)
Conductivity-	µmhos										
C-µg/L	Control Type	Coun		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	328.5	325.8	331.2	323	333	1.134	3.207	0.98%	0
3		8	320	309.9	330.1	310	338	4.289	12.13	3.79%	0
5		8	313.4	307.9	318.8	308	325	2.314	6.545	2.09%	0
10		8	311.9	307.1	316.7	308	322	2.03	5.743	1.84%	0
30		8	303.6	294.5	312.7	291	321	3.84	10.86	3.58%	0
	80. 11	5	311	308.2	313.8	310	315	1 💡	2.236	0.72%	0
Overall		45	314.7			291	338	-	·		0 (0%)
Dissolved Oxy											
C-µg/L	Control Type	Coun		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr	8	7.925	7.717	8.133	7.7	8.4	0.08813	0.2493	3.15%	0
3		8	8.288	7.829	8.746	7.7	9.5	0.1941	0.5489	6.62%	0
5		8	8.25	7.986	8.514	7.8	8.7	0.1118	0.3162	3.83%	0
10		8	8.288	7.986	8.589	7.7	8.7	0.1274	0.3603	4.35%	0
30		8	8.288	7.964	8.611	7.7	8.8	0.1368	0.3871	4.67%	0
50		5	8.38	7.993	8.767	8	8.7	0.1393	0.3114	3.72%	0
Overall		45	8.236		·	7.7	9.5				0 (0%)
Hardness (Ca											
C-µg/L	Control Type	Count		95% LCL	95% UCL		Max	Std Err	Std Dev	CV%	QA Count
0	Negative Contr		93.5	90.37	96.63	90	97	1.323	3.742	4.0%	0
50		5	84	84	84	84	84	0	0	0.0%	0
Overall		13	88.75			84	97				0 (0%)
		_									_
pH-Units			t Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
C-µg/L	Control Type	Count					83	0.09402	0.2659	2 2 2 2 0 /	0
<b>С-µg/L</b> 0	Control Type Negative Contr	8	7.975	7.753	8.197	7.5	8.3			3.33%	
С-µg/L 0 3		8 8	7.975 8	7.874	8.126	7.8	8.2	0.05345	0.1512	1.89%	0
С-µg/L 0 3 5		8 8 8	7.975 8 7.963	7.874 7.822	8.126 8.103	7.8 7.7	8.2 8.2	0.05345 0.05957	0.1512 0.1685	1.89% 2.12%	0 0
С-µg/L 0 3 5 10		8 8 8 8	7.975 8 7.963 7.938	7.874 7.822 7.797	8.126 8.103 8.078	7.8 7.7 7.7	8.2 8.2 8.2	0.05345 0.05957 0.05957	0.1512 0.1685 0.1685	1.89% 2.12% 2.12%	0 0 0
С-µg/L 0 3 5		8 8 8	7.975 8 7.963	7.874 7.822	8.126 8.103	7.8 7.7	8.2 8.2	0.05345 0.05957	0.1512 0.1685	1.89% 2.12%	0 0

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CETIS™ v1.8.7.11

Analyst:_____ QA:____

CETIS	Measurement	Report						eport Date: est Code:			l:40 (p 2 of 2 16-9645-764
Ceriodap	hnia 7-d Survival ar	nd Reproc	luction Tes	t							ng Labs, Inc.
Temperat	ture-°C							5 I			
C-µg/L	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Coun
0	Negative Contr	8	24.2	23.96	24.44	24	24.7	0.1018	0.2878	1.19%	0
3	5) ()	8	24.19	23.97	24.41	24	24.6	0.09342	0.2642	1.09%	0
5		8	24.14	23.96	24.31	24	24.6	0.07303	0.2066	0.86%	0
10		8	24.16	24.01	24.31	24	24.5	0.06249	0.1768	0.73%	0
30		8	24.13	23.95	24.3	24	24.6	0.07257	0.2053	0.85%	0
50		5	24.16	23.85	24.47	24	24.6	0.1122	0.251	1.04%	0
Overall		45	24.16			24	24.7				0 (0%)
Alkalinity	(CaCO3)-mg/L										
C-µg/L	Control Type	1	2	3	4	5	6	7	8		
0	Negative Contr		68	68	68	63	63	63	63		
50		60	60	60	60	60					
	vity-µmhos										
C-µg/L	Control Type	1	2	3	4	5	6	7	8		
0	Negative Contr	328	328	332	323	328	330	326	333		
3		310	310	334	310	315	312	331	338		
5		309	308	314	309	310	310	322	325		
10		308	308	311	309	308	309	320	322		
30		292	291	298	310	309	312	321	296		
50		310	310	310	310	315					
Dissolved	i Oxygen-mg/L										
C-µg/L	Control Type	1	2	3	4	5	6	7	8		
0	Negative Contr	7.7	7.8	8.4	7.7	7.8	7.9	7.9	8.2		
3		8.2	8.4	9.5	8.3	7.7	7.8	8.3	8.1		
5		8.4	8.4	8	8.7	7.9	7.8	8.3	8.5		
10		8.3	8.5	8.6	8.4	7.8	7.7	8.3	8.7		
30	25	8.3	8.6	8.6	8.2	7.8	7.7	8.3	8.8		
50		8.1	8.5	8.7	8.6	8					
Hardness	(CaCO3)-mg/L										
C-µg/L	Control Type	1	2	3	4	5	6	7	8		
0	Negative Contr	97	97	97	97	90	90	90	90		
50		84	84	84	84	84					
pH-Units											
C-µg/L	Control Type	1	2	3	4	5	6	7	8	_	
)	Negative Contr	8	8.1	7.9	7.7	8.3	8.1	8.2	7.5		
3		7.9	8	8.2	7.8	7.9	7.9	8.1	8.2		
5	0222.0000 Million 21	7.9	7.9	8.2	7.7	7.9	7.9	8	8.2		
10		7.8	7.8	8.1	7.7	8	7.9	8	8.2		
30	9	7.8	7.7	8.1	7.8	8.1	7.9	8	8.1		
50		7.8	7.7	8	7.8	8.1					
Femperati	ure-°C										
C-µg/L	Control Type	1	2	3	4	5	6	7	8		
)	Negative Contr	24.6	24.1	24.7	24.2	24	24	24	24	100	
3		24.6	24.1	24.6	24.2	24	24	24	24		
5 8	34 - 3	24	24.2	24.6	24.2	24.1	24	24	24		
10		24.3	24.2	24.5	24.2	24.1	24	24	24		
30	-	24	24.1	24.6	24.2	24.1	24	24	24		
50		24	24.1	24.6	24.1	24					

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Analyst:_____ QA:____



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## CHRONIC SELENASTRUM GROWTH BIOASSAY

DATE:

## 7 January - 2016

STANDARD TOXICANT: Cadmium Chloride

NOEC =

80.00 ug/l

IC25 = IC50 = 104.90 ug/l 156.20 ug/l

Yours very truly,

Scott Johnson Laboratory Director

CETIS Sum	mary Repo	rt						Repor Test C	rt Date: Code:			51 (p 1 of 5-2352-366
Selenastrum (	Browth Test								Aquatic E	ioassay & C	Consulting	g Labs, Inc
Batch ID: Start Date: Ending Date: Duration:	03-4998-4998 07 Jan-16 13:09 11 Jan-16 14:00 4d 1h	Prot	ocol: E cies: S	Cell Growth EPA/821/R-02-6 Selenastrum ca Aquatic Biosyst	pricornutum		l	Analy: Diluer Brine: Age:	nt: Lab	oratory Wate Applicable	٢	
Sample ID: Sample Date: Receive Date: Sample Age:	00-2681-6804 07 Jan-16 13:09 NA	Code Mate Sour Stati	erial: C rce: F	SEL010716 Cadmium chlori Reference Toxic REF TOX				Client Projec		rnal Lab		
Comparison S	ummary			6								
Analysis ID	Endpoint		NOEL	LOEL	TOEL	PMSD	TU		Method			
14-1417-3399	Cell Density	i.	80	140	105.8	12.0%			Dunnett N	Iultiple Com	parison Te	st
Point Estimate	Summarv											
Analysis ID	Endpoint		Level	µg/L	95% LCL	95% UCL	τυ		Method			
18-5250-6959			IC5	55.52	25.19	82.51				erpolation (IC	PIN)	
10 0200 0000	oon bonony		IC10	71.03	53.7	96.08					,	
			IC15	84.34	65.16	101.3						
			IC20	94.62	76.74	108.8						
			IC25	104.9	89.64	117.6						
			IC40	135.7	124.5	149.1						
	6		IC50	156.2	144.8	165						
Test Acceptab	ility											
Analysis ID	Endpoint		Attribut	te	Test Stat	TAC Limi	ts		Overlap	Decision		
14-1417-3399	Cell Density	<u></u>	Control		0.01484	NL - 0.2			Yes	Passes Ad	ceptability	/ Criteria
18-5250-6959	Cell Density		Control	CV	0.01484	NL - 0.2			Yes	Passes Ad		
14-1417-3399	Cell Density		Control	Resp	1.09E+6	1.00E+6 -	NL		Yes	Passes Ad		
18-5250-6959	Cell Density		Control	Resp	1.09E+6	1.00E+6 -	NL		Yes	Passes Ac		
14-1417-3399	Cell Density		PMSD		0.1205	0.091 - 0.2	29		Yes	Passes Ad	ceptability	/ Criteria
Cell Density S	ummary											
C-µg/L	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max		Std Err	Std Dev	CV%	%Effec
	Negative Control	4	1.088E	+6 1.062E+6	1.114E+6	1.064E+6	1.099	)E+6	8.073E+3	1.615E+4	1.48%	0.0%
20	-	4		+6 1.258E+6								-28.19
40		4	1.288E	+6 1.091E+6	1.484E+6	1.140E+6	1.397	7E+6	6.162E+4	1.232E+5	9.57%	-18.349
80		4	1.095E	+6 9.569E+5	1.233E+6	1.022E+6	1.220	)E+6	4.330E+4	8.661E+4	7.91%	-0.62%
140		4	7.280E	+5 6.338E+5	8.222E+5	6.730E+5	7.990	)E+5	2.959E+4	5.918E+4	8.13%	33.09%
180		4	4.818E	+5 4.145E+5	5.490E+5	4.450E+5	5.250	)E+5	2.112E+4	4.225E+4	8.77%	55.72%
Cell Density D	etail											
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4							
0	Negative Control	1.094E+6	1.099E	+6 1.064E+6	1.095E+6							
20		1.333E+6	1.310E	+6 1.480E+6	1.456E+6							
40		1.381E+6	1.232E	+6 1.397E+6	1.140E+6							
80		1.220E+6	1.060E	+6 1.022E+6	1.077E+6							
140		6.730E+5	7.540E	+5 7.990E+5	6.860E+5							
				+5 5.250E+5								

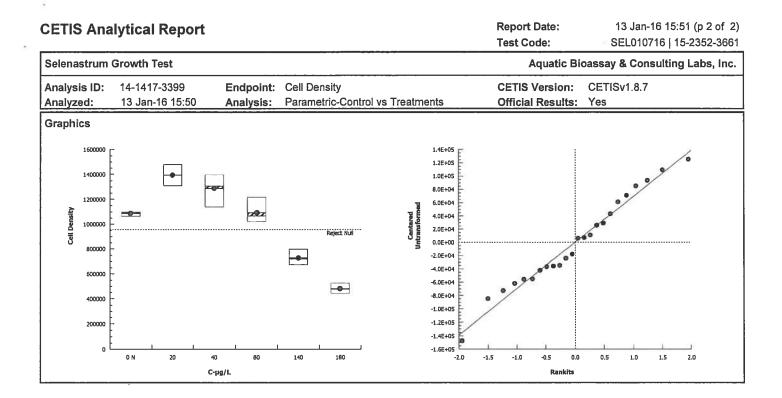
Analyst: _____ QA: _____A55

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CETIS™ v1.8.7.11

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CETIS Ana	lytical Repo	rt					Test (	rt Date: Code:			51 (p 1 of 2 5-2352-366
Selenastrum	Growth Test							Aquatic Bi	oassay & C	onsulting	g Labs, Inc
Analysis ID: Analyzed:	14-1417-3399 13 Jan-16 15:50		•	ll Density rametric-Con	trol vs Treat	ments		S Version: al Results:	CETISv1.8 Yes	3.7	
Data Transfor	·m	Zeta	Alt Hyp	Trials	Seed		PMSD	NOEL	LOEL	TOEL	TU
Untransformed		NA	C > T	NA	NA		12.0%	80	140	105.8	
Dunnett Multi	ple Comparison	Test	<u> </u>							<u> </u>	· ····································
Control	vs C-µg/L		Test Stat	Critical	MSD DF	P-Value	P-Type	Decision(	r:5%)		
Negative Cont			-5.634	2.407	1E+05 6	1.0000	CDF		icant Effect		
Negative cont	40		-3.664	2.407	1E+05 6	1.0000	CDF		icant Effect		
	80		-0.124	2.407	1E+05 6	0.8672	CDF	-	icant Effect		
	140*		6.612	2.407	1E+05 6	< 0.0001	CDF	Significant			
	180*		11.13	2.407	1E+05 6	< 0.0001	CDF	Significant			
ANOVA Table											
Source	Sum Squa	res	Mean Sq	uare	DF	F Stat	P-Value	Decision(	a:5%)		
Between	2.387365E		4.774729	E+11	5	80.53	<0.0001	Significant	Effect		
Error	1.067293E	+11	59294030	000	18			-			
Total	2.494094E	+12			23	_					
Distributional	Tests										
Attribute	Test			Test Stat	Critical	P-Value	Decision(	a:1%)			
Variances	Bartlett Ec	quality of Va	ariance	9.196	15.09	0.1015	Equal Vari	ances			
Variances	Mod Leve	ne Equality	of Variance	e 3.244	4.248	0.0291	Equal Vari	ances			
Variances	Levene Ed	quality of Va	ariance	5.257	4.248	0.0038	Unequal V	ariances			
Distribution	Shapiro-W	vilk W Norn	nality	0.9763	0.884	0.8200	Normal Dis	stribution			
Distribution	Kolmogor	ov-Smirnov	D	0.1117	0.2056	0.6287	Normal Dis	stribution			
Distribution	D'Agostine	o Skewness	5	0.1423	2.576	0.8868	Normal Dis	stribution			
Distribution	D'Agostine	o Kurtosis		0.2983	2.576	0.7654	Normal Dis	stribution			
Distribution	D'Agostine	o-Pearson l	K2 Omnibu	s 0.1093	9.21	0.9468	Normal Di	stribution			
Distribution	Anderson	-Darling A2	Normality	0.2888	3.878	0.6459	Normal Di	stribution			
Cell Density S	Summary										
C-µg/L	Control Type	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	Negative Control	4	1.088E+6	1.062E+6	1.114E+6	1095000	1.064E+6	1.099E+6	8.072E+3	1.48%	0.0%
20		4	1.395E+6	1.258E+6	1.531E+6	1395000	1.310E+6	1.480E+6	4.283E+4	6.14%	-28.19%
40		4	1.288E+6	1.091E+6	1.484E+6	1307000	1.140E+6	1.397E+6	6.162E+4	9.57%	-18.34%
80		4	1.095E+6	9.569E+5	1.233E+6	1069000	1.022E+6	1.220E+6	4.330E+4	7.91%	-0.62%
140		4	7.280E+5	6.338E+5	8.222E+5	720000	6.730E+5	7.990E+5	2.959E+4	8.13%	33.09%
180	S	4	4.818E+5	4.145E+5	5.490E+5	478500	4.450E+5	5.250E+5	2.112E+4	8.77%	55.72%
Cell Density [	Detail										
C-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4						
0	Negative Control				1.095E+6						
20		1.333E+6	1.310E+6	1.480E+6	1.456E+6						
		1.381E+6	1.232E+6	1.397E+6	1.140E+6						
40					4.0775.0						
40 80		1.220E+6	1.060E+6	1.022E+6	1.077546						
				i 1.022E+6 i 7.990E+5							



_____QA:____ Analyst:__

rum Growth Test						Test	Code:	SEL010716	15-2352-3661
							Aquatic Bi	oassay & Consult	ing Labs, Inc.
ID: 18-5250-6959 : 13 Jan-16 15:50	-		Density ear Interpola	tion (ICPIN)			S Version: ial Results:	CETISv1.8.7 Yes	1 68
terpolation Options									
orm Y Transform	Seed	Res	amples	Exp 95%	CL Meth	od			
Linear	0	280		Yes		Point Interpo	plation		
imates									
ug/L 95% LCL	95% UCL								
55.52 25.19	82.51								
	105						·····		
	•								
Negative Control									
	4								
sity Detail	· · ·· ·		<u></u>						
	Ren 1	Rep 2	Rep 3	Ren 4					
	-								
noguno como									
0.					· · · · · · · · · · · · · · · · · · ·				
1.4E+06									
1.2E+D6	د.								
1.0E+06									
8.0E+05 -									
5.0E+05									
- -									
2.0E+05									
	<u> </u>	120 140	160 180						
u 20 40 64	с-µg/L	1207 140	100 180					04	
	Y Transform           Linear           imates           ig/L         95% LCL           35.52         25.19           1.03         53.7           34.34         65.16           04.62         76.74           04.9         89.64           35.7         124.5           56.2         144.8           ity Summary         Control Type           Negative Control         Negative Control           ity Detail         Control Type           Negative Control         Negative Control           .0E+05         -           .0E+05         -           .0E+05         -           .0E+05         -	Y Transform         Seed           Linear         0           imates         95% LCL         95% UCL           i5.52         25.19         82.51           10.03         53.7         96.08           i4.34         65.16         101.3           i4.62         76.74         108.8           04.9         89.64         117.6           35.7         124.5         149.1           56.2         144.8         165           ity Summary         Control Type         Count           Negative Control         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           50         1.094E+6           1.381E+6         1.381E+6           0.0E+05 <td< td=""><td>Y Transform         Seed         Res           Linear         0         280           imates         95% LCL         95% UCL         55.52         25.19         82.51           1.03         53.7         96.08         34.34         65.16         101.3           44.34         65.16         101.3         35.7         124.5         149.1           56.2         144.8         165         101.3         35.7         128.5           ity Summary         Control Type         Count         Mean         Mean           Negative Control         4         1.088E+6         4         1.095E+6           4         1.288E+6         4         1.095E+6         4         1.095E+6           4         1.095E+6         4         1.095E+6         1.095E+6         1.333E+6         1.310E+6           1.333E+6         1.310E+6         1.333E+6         1.322E+6         1.060E+6         1.332E+6         1.322E+6         1.220E+6         1.060E+6         6.730E+5         7.540E+5         4.460E+5         4.450E+5         4.460E+5         4.450E+5         4.460E+5         5.66+05         6.730E+5         7.540E+5         4.450E+5         4.460E+5         5.66+05         6.730E+5         <t< td=""><td>Y Transform         Seed         Resamples           Linear         0         280           imates         95% LCL         95% UCL           i5.52         25.19         82.51           1.03         53.7         96.08           i4.42         76.74         108.8           04.9         89.64         117.6           35.7         124.5         149.1           56.2         144.8         165           ity Summary         Control Type         Count         Mean           Negative Control         4         1.088E+6         1.064E+6           4         1.395E+6         1.310E+6         4           4         1.288E+6         1.140E+6         4           4         1.095E+6         1.022E+6         4           4         1.095E+6         1.022E+6         1.022E+6           1095E+6         1.024E+6         1.033E+6         1.310E+6         1.480E+6           1.333E+6         1.310E+6         1.480E+6         1.022E+6         1.022E+6           1.220E+5         4.450E+5         5.250E+5         4.450E+5         5.250E+5</td><td>Y Transform         Seed         Resamples         Exp 95%           Linear         0         280         Yes           imates         103         55.2         25.19         82.51           103         53.7         96.08         4.34         65.16         101.3           4.62         76.74         108.8         04.9         89.64         117.6           35.7         124.5         149.1         56.2         144.8         165           Ity Summary         Calu           Control Type         Mean         Min         Max           Negative Control         4         1.088E+6         1.004E+6         1.099E+6           4         1.095E+6         1.310E+6         1.480E+6         1.220E+6           4         1.095E+6         1.022E+6         1.220E+6         1.220E+6           4         1.095E+5         6.730E+5         7.990E+5         4.400E+5         5.250E+5           Rep 1         Rep 2         Rep 3         Rep 4           Negative Control         1.094E+6         1.064E+6         1.095E+6         1.337E+6         1.400E+6         1.400E+6         1.202E+6         1.307E+6         1.400E+6</td><td>Y Transform         Seed         Resamples         Exp 95% CL         Meth Two-f           Imates         0         280         Yes         Two-f           imates         95% LCL         95% UCL         5.52         25.19         82.51           1.03         53.7         96.08         4.4.34         65.16         101.3           44.34         65.16         101.3         4.62         76.74         108.8           40.9         89.64         117.6         35.7         124.5         149.1           56.2         144.8         165         1.058E+6         1.058E+6         1.099E+6         8.072E+3           4         1.288E+6         1.140E+6         1.397E+6         6.162E+4         4         1.298E+6         1.20E+6         4.330E+4           4         1.288E+6         1.140E+6         1.397E+6         6.162E+4         4         4.818E+5         4.450E+5         5.250E+5         2.5112E+4           tity Detail         Control Type         Rep 1         Rep 2         Rep 3         Rep 4         1.232E+6         1.302E+6         1.305E+6         1.302E+6         1.302E+6         1.450E+6         1.095E+6         1.332E+6         1.302E+6         1.450E+5         4.450E+5</td></t<><td>rm         Y Transform         Seed         Resamples         Exp 95%, CL         Method           Linear         0         280         Yes         Two-Point Interpreters           mates         95%, LCL         95%, UCL         55.2         25.19         92.51           10.3         53.7         96.08         44.43         65.16         101.3           44.62         76.74         108.8         0.9         89.64         117.6           55.2         144.8         165         1001.44.8         165         1001.44.8           Ky Summary         Calculated Variate         4.232844         8.072E+3         1.614E+4           4         1.395E+6         1.310E+6         1.090E+6         8.072E+3         1.614E+4           4         1.395E+6         1.310E+6         1.400E+6         4.232E+4         8.66E+4           4         1.288E+6         1.30E+6         1.220E+6         4.323E+4         8.66E+4           4         7.280E+5         5.250E+5         5.250E+5         5.110E+5         4.232E+5           109E+6         1.09E+6         1.09E+6         1.09E+6         1.220E+6         1.40E+6           1.20E+6         1.30E+6         1.40E+6         1.4</td><td>rm         Y Transform         Seed         Resamples         Exp 95% CL         Method           Linear         0         280         Yes         Two-Point Interpolation           imates         95% LCL         95% UCL         5.52         25.19         82.51        </td><td>Y Transform         Seed         Resamples         Exp 95% CL         Method           Linear         0         280         Yes         Two-Point Interpolation           imates         95% LCL         95% UCL         55.7         25.19         82.51           1.03         53.7         96.08         4.13         65.16         101.3           4.34         65.16         101.3         4.452         76.74         108.8           0.43         98.64         117.6         35.7         24.5         149.1           55.2         214.8         165         101.8         4.1305554         1.302845         1.0048454         1.008284         0.0%           Vegative Control         4         1.0088456         1.302845         1.302845         1.302845         3.20285         2.95084         8.016144         1.43%         33.09%           4         1.208845         1.202845         1.220284         8.061644         7.91%         -0.02%           4         7.200845         5.730845         7.990845         2.950844         8.01644         8.73%         33.09%           4         4.281845         1.460246         1.092846         1.4508144         8.77%         55.72%     <!--</td--></td></td></td<>	Y Transform         Seed         Res           Linear         0         280           imates         95% LCL         95% UCL         55.52         25.19         82.51           1.03         53.7         96.08         34.34         65.16         101.3           44.34         65.16         101.3         35.7         124.5         149.1           56.2         144.8         165         101.3         35.7         128.5           ity Summary         Control Type         Count         Mean         Mean           Negative Control         4         1.088E+6         4         1.095E+6           4         1.288E+6         4         1.095E+6         4         1.095E+6           4         1.095E+6         4         1.095E+6         1.095E+6         1.333E+6         1.310E+6           1.333E+6         1.310E+6         1.333E+6         1.322E+6         1.060E+6         1.332E+6         1.322E+6         1.220E+6         1.060E+6         6.730E+5         7.540E+5         4.460E+5         4.450E+5         4.460E+5         4.450E+5         4.460E+5         5.66+05         6.730E+5         7.540E+5         4.450E+5         4.460E+5         5.66+05         6.730E+5 <t< td=""><td>Y Transform         Seed         Resamples           Linear         0         280           imates         95% LCL         95% UCL           i5.52         25.19         82.51           1.03         53.7         96.08           i4.42         76.74         108.8           04.9         89.64         117.6           35.7         124.5         149.1           56.2         144.8         165           ity Summary         Control Type         Count         Mean           Negative Control         4         1.088E+6         1.064E+6           4         1.395E+6         1.310E+6         4           4         1.288E+6         1.140E+6         4           4         1.095E+6         1.022E+6         4           4         1.095E+6         1.022E+6         1.022E+6           1095E+6         1.024E+6         1.033E+6         1.310E+6         1.480E+6           1.333E+6         1.310E+6         1.480E+6         1.022E+6         1.022E+6           1.220E+5         4.450E+5         5.250E+5         4.450E+5         5.250E+5</td><td>Y Transform         Seed         Resamples         Exp 95%           Linear         0         280         Yes           imates         103         55.2         25.19         82.51           103         53.7         96.08         4.34         65.16         101.3           4.62         76.74         108.8         04.9         89.64         117.6           35.7         124.5         149.1         56.2         144.8         165           Ity Summary         Calu           Control Type         Mean         Min         Max           Negative Control         4         1.088E+6         1.004E+6         1.099E+6           4         1.095E+6         1.310E+6         1.480E+6         1.220E+6           4         1.095E+6         1.022E+6         1.220E+6         1.220E+6           4         1.095E+5         6.730E+5         7.990E+5         4.400E+5         5.250E+5           Rep 1         Rep 2         Rep 3         Rep 4           Negative Control         1.094E+6         1.064E+6         1.095E+6         1.337E+6         1.400E+6         1.400E+6         1.202E+6         1.307E+6         1.400E+6</td><td>Y Transform         Seed         Resamples         Exp 95% CL         Meth Two-f           Imates         0         280         Yes         Two-f           imates         95% LCL         95% UCL         5.52         25.19         82.51           1.03         53.7         96.08         4.4.34         65.16         101.3           44.34         65.16         101.3         4.62         76.74         108.8           40.9         89.64         117.6         35.7         124.5         149.1           56.2         144.8         165         1.058E+6         1.058E+6         1.099E+6         8.072E+3           4         1.288E+6         1.140E+6         1.397E+6         6.162E+4         4         1.298E+6         1.20E+6         4.330E+4           4         1.288E+6         1.140E+6         1.397E+6         6.162E+4         4         4.818E+5         4.450E+5         5.250E+5         2.5112E+4           tity Detail         Control Type         Rep 1         Rep 2         Rep 3         Rep 4         1.232E+6         1.302E+6         1.305E+6         1.302E+6         1.302E+6         1.450E+6         1.095E+6         1.332E+6         1.302E+6         1.450E+5         4.450E+5</td></t<> <td>rm         Y Transform         Seed         Resamples         Exp 95%, CL         Method           Linear         0         280         Yes         Two-Point Interpreters           mates         95%, LCL         95%, UCL         55.2         25.19         92.51           10.3         53.7         96.08         44.43         65.16         101.3           44.62         76.74         108.8         0.9         89.64         117.6           55.2         144.8         165         1001.44.8         165         1001.44.8           Ky Summary         Calculated Variate         4.232844         8.072E+3         1.614E+4           4         1.395E+6         1.310E+6         1.090E+6         8.072E+3         1.614E+4           4         1.395E+6         1.310E+6         1.400E+6         4.232E+4         8.66E+4           4         1.288E+6         1.30E+6         1.220E+6         4.323E+4         8.66E+4           4         7.280E+5         5.250E+5         5.250E+5         5.110E+5         4.232E+5           109E+6         1.09E+6         1.09E+6         1.09E+6         1.220E+6         1.40E+6           1.20E+6         1.30E+6         1.40E+6         1.4</td> <td>rm         Y Transform         Seed         Resamples         Exp 95% CL         Method           Linear         0         280         Yes         Two-Point Interpolation           imates         95% LCL         95% UCL         5.52         25.19         82.51        </td> <td>Y Transform         Seed         Resamples         Exp 95% CL         Method           Linear         0         280         Yes         Two-Point Interpolation           imates         95% LCL         95% UCL         55.7         25.19         82.51           1.03         53.7         96.08         4.13         65.16         101.3           4.34         65.16         101.3         4.452         76.74         108.8           0.43         98.64         117.6         35.7         24.5         149.1           55.2         214.8         165         101.8         4.1305554         1.302845         1.0048454         1.008284         0.0%           Vegative Control         4         1.0088456         1.302845         1.302845         1.302845         3.20285         2.95084         8.016144         1.43%         33.09%           4         1.208845         1.202845         1.220284         8.061644         7.91%         -0.02%           4         7.200845         5.730845         7.990845         2.950844         8.01644         8.73%         33.09%           4         4.281845         1.460246         1.092846         1.4508144         8.77%         55.72%     <!--</td--></td>	Y Transform         Seed         Resamples           Linear         0         280           imates         95% LCL         95% UCL           i5.52         25.19         82.51           1.03         53.7         96.08           i4.42         76.74         108.8           04.9         89.64         117.6           35.7         124.5         149.1           56.2         144.8         165           ity Summary         Control Type         Count         Mean           Negative Control         4         1.088E+6         1.064E+6           4         1.395E+6         1.310E+6         4           4         1.288E+6         1.140E+6         4           4         1.095E+6         1.022E+6         4           4         1.095E+6         1.022E+6         1.022E+6           1095E+6         1.024E+6         1.033E+6         1.310E+6         1.480E+6           1.333E+6         1.310E+6         1.480E+6         1.022E+6         1.022E+6           1.220E+5         4.450E+5         5.250E+5         4.450E+5         5.250E+5	Y Transform         Seed         Resamples         Exp 95%           Linear         0         280         Yes           imates         103         55.2         25.19         82.51           103         53.7         96.08         4.34         65.16         101.3           4.62         76.74         108.8         04.9         89.64         117.6           35.7         124.5         149.1         56.2         144.8         165           Ity Summary         Calu           Control Type         Mean         Min         Max           Negative Control         4         1.088E+6         1.004E+6         1.099E+6           4         1.095E+6         1.310E+6         1.480E+6         1.220E+6           4         1.095E+6         1.022E+6         1.220E+6         1.220E+6           4         1.095E+5         6.730E+5         7.990E+5         4.400E+5         5.250E+5           Rep 1         Rep 2         Rep 3         Rep 4           Negative Control         1.094E+6         1.064E+6         1.095E+6         1.337E+6         1.400E+6         1.400E+6         1.202E+6         1.307E+6         1.400E+6	Y Transform         Seed         Resamples         Exp 95% CL         Meth Two-f           Imates         0         280         Yes         Two-f           imates         95% LCL         95% UCL         5.52         25.19         82.51           1.03         53.7         96.08         4.4.34         65.16         101.3           44.34         65.16         101.3         4.62         76.74         108.8           40.9         89.64         117.6         35.7         124.5         149.1           56.2         144.8         165         1.058E+6         1.058E+6         1.099E+6         8.072E+3           4         1.288E+6         1.140E+6         1.397E+6         6.162E+4         4         1.298E+6         1.20E+6         4.330E+4           4         1.288E+6         1.140E+6         1.397E+6         6.162E+4         4         4.818E+5         4.450E+5         5.250E+5         2.5112E+4           tity Detail         Control Type         Rep 1         Rep 2         Rep 3         Rep 4         1.232E+6         1.302E+6         1.305E+6         1.302E+6         1.302E+6         1.450E+6         1.095E+6         1.332E+6         1.302E+6         1.450E+5         4.450E+5	rm         Y Transform         Seed         Resamples         Exp 95%, CL         Method           Linear         0         280         Yes         Two-Point Interpreters           mates         95%, LCL         95%, UCL         55.2         25.19         92.51           10.3         53.7         96.08         44.43         65.16         101.3           44.62         76.74         108.8         0.9         89.64         117.6           55.2         144.8         165         1001.44.8         165         1001.44.8           Ky Summary         Calculated Variate         4.232844         8.072E+3         1.614E+4           4         1.395E+6         1.310E+6         1.090E+6         8.072E+3         1.614E+4           4         1.395E+6         1.310E+6         1.400E+6         4.232E+4         8.66E+4           4         1.288E+6         1.30E+6         1.220E+6         4.323E+4         8.66E+4           4         7.280E+5         5.250E+5         5.250E+5         5.110E+5         4.232E+5           109E+6         1.09E+6         1.09E+6         1.09E+6         1.220E+6         1.40E+6           1.20E+6         1.30E+6         1.40E+6         1.4	rm         Y Transform         Seed         Resamples         Exp 95% CL         Method           Linear         0         280         Yes         Two-Point Interpolation           imates         95% LCL         95% UCL         5.52         25.19         82.51	Y Transform         Seed         Resamples         Exp 95% CL         Method           Linear         0         280         Yes         Two-Point Interpolation           imates         95% LCL         95% UCL         55.7         25.19         82.51           1.03         53.7         96.08         4.13         65.16         101.3           4.34         65.16         101.3         4.452         76.74         108.8           0.43         98.64         117.6         35.7         24.5         149.1           55.2         214.8         165         101.8         4.1305554         1.302845         1.0048454         1.008284         0.0%           Vegative Control         4         1.0088456         1.302845         1.302845         1.302845         3.20285         2.95084         8.016144         1.43%         33.09%           4         1.208845         1.202845         1.220284         8.061644         7.91%         -0.02%           4         7.200845         5.730845         7.990845         2.950844         8.01644         8.73%         33.09%           4         4.281845         1.460246         1.092846         1.4508144         8.77%         55.72% </td

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CETIS™ v1.8.7.11

Analyst: _____QA:___P

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CETIS Mea	surement l	Repoi	rt					Report Date: Test Code:			:51 (p 1 of 15-2352-366
Selenastrum (	Growth Test								Bioassay &		
Batch ID:	03-4998-4998		Tost Tupo:	Cell Growth							
Start Date:	07 Jan-16 13:0	0	Protocol:		-013 (2002)			Analyst: Diluent: La	aboratory Wa	tor	
Ending Date:		1 Jan-16 14:00 Species:			EPA/821/R-02-013 (2002) Selenastrum capricornutum				ot Applicable		
Duration:	4d 1h Source:			Aquatic Biosystems, CO				Brine: N Age:	or Applicable		
······											
Sample ID:	00-2681-6804		Code:	SEL010716	-1.1				ternal Lab		
	07 Jan-16 13:0	19	Material:	Cadmium chlo				Project:			
Receive Date: Sample Age:			Source: Station:	Reference Tox REF TOX	licant						
				REFTOR							
Alkalinity (Ca										-	
C-µg/L	Control Type	Count		95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Cou
0 20	Negative Contr	1 1	70 78			70 78	70 78	0 0	0 0	0.0% 0.0%	0
40		1	70 84			70 84	70 84	0	0	0.0%	0 0
80		1	79			79	79	0	0	0.0%	0
140		1	79			79 79	79	0	0	0.0%	0
180		1	67			67	67	0	0	0.0%	0
Overall	······································	6	76.17			67	84	V	~	0.070	0 (0%)
Conductivity-	umhos	_									
	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Cou
	Negative Contr	_	412.4	405.5	419.3	405	420	2.482	5.55	1.35%	0
20		5	442.8	434.5	451.1	432	450	2.99	6.686	1.51%	0
40		5	415	408,5	421.5	411	424	2.345	5.244	1.26%	õ
80		5	403.2	402.6	403.8	403	404	0.2	0.4472	0.11%	0
140		5	378.8	370.4	387.2	372	389	3.023	6.76	1.79%	0
180		5	356	351.5	360.5	351	361	1.612	3.606	1.01%	0
Overall		30	401.4			351	450				0 (0%)
Hardness (Ca	CO3)-ma/L		· ·				. · ·				
	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Cou
0	Negative Contr	1	100			100	100	0	0	0.0%	0
20		1	100			100	100	0	0	0.0%	0
40		1	108			108	108	0	0	0.0%	0
80		1	112			112	112	0	0	0.0%	0
140		1	116			116	116	0	0	0.0%	0
180	8	1	104			104	104	0	0	0.0%	0
Overall	8	6	106.7			100	116				0 (0%)
pH-Units											
	Control Type	Count		95% LCL		Min	Max	Std Err	Std Dev	CV%	QA Cou
	Negative Contr		7.74	7.598	7.882	7.6	7.9	0.05099	0.114	1.47%	0
20		5	7.98	7.796	8.164	7.8	8.2	0.06633	0.1483	1.86%	0
40		5	8.02	7.884	8.156	7.9	8.2	0.04899	0.1095	1.37%	0
80		5	8.02	7.884	8.156	7.9	8.2	0.04899	0.1095	1.37%	0
140	S.	5	7.98	7.876	8.084	7.9 7.0	8.1 °	0.03742	0.08366	1.05%	0
180 Overall	3	5 30	7.96	7.892	8.028	7.9	8.2	0.02449	0.05476	0.69%	0 (0%)
Temperature-°	20										
•	Control Type	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Col
	Negative Contr		24.1	23.82	24.38	24	24.5	0.1	0.2236	0.93%	0
20	<b>U</b>	5	24.1	23.82	24.38	24	24.5	0.1	0.2236	0.93%	0
40		5	24.1	23.82	24.38	24	24.5	0.1	0.2236	0.93%	0
80		5	24.1	23.82	24.38	24	24.5	0.1	0.2236	0.93%	0
140	2	5	24.1	23.82	24.38	24	24.5	0.1	0.2236	0.93%	0
180	- ( <del>11)</del>	5	24.1	23.82	24.38	24	24.5	0.1	0.2236	0.93%	0
Overall		30	24.1	·····		24	24.5				0 (0%)
Overall											

CETIS M	easurement F	Report					Report Date: Test Code:	13 Jan-16 15:51 (p 2 of 2 SEL010716   15-2352-366
Selenastru	m Growth Test		Aquatic Bioassay & Consulting Labs, Inc.					
Alkalinity (	CaCO3)-mg/L							
C-µg/L	Control Type	1						
0	Negative Contr	70						· · · · ·
20		78						
40		84						
80		79						
140		79						
180		67						
Conductivi	ty-µmhos							
C-µg/L	Control Type	1	2	3	4	5		
0	Negative Contr	411	411	415	420	405		
20		432	445	442	450	445		
40		412	411	415	413	424		
80		403	403	403	403	404		
140		375	376	382	389	372		
180		351	356	355	357	361		
Hardness (	CaCO3)-mg/L							
C-µg/L	Control Type	1						
0	Negative Contr	100						
20		100						
40		108						
80		112						
140		116						
180		104						
pH-Units	· .							
C-µg/L	Control Type	1	2	3	4	5		
0	Negative Contr	7.7	7.6	7.7	7.8	7.9		
20		8	8.2	7.9	7.8	8		
40		8	8.2	8	7.9	8		
80		8	8.2	8	8	7.9		
140		7.9	8.1	8	8	7.9		
180		7.9	8	8	8	7.9		
Temperatu	re-°C							
C-µg/L	Control Type	1	2	3	4	5		
0	Negative Contr	24.5	24	24	24	24		
20	3	24.5	24	24	24	24		
40		24.5	24	24	24	24		
80		24.5	24	24	24	24		
140		24.5	24	24	24	24		
180		24.5	24	24	24	24		

Analyst: /QA:_

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