CITY OF STOCKTON

DEPARTMENT OF MUNICIPAL UTILITIES
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October 1, 2017

Elizabeth Lee, Unit Chief
Municipal Storm Water Permitting Unit
California Regional Water Quality Control Board – Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

CITY OF STOCKTON AND COUNTY OF SAN JOAQUIN STORMWATER MANAGEMENT PROGRAMS 2016-2017 ANNUAL REPORT (ORDER NO. R5-2016-0040, NPDES PERMIT NO. CAS0085324)

For your review and consideration, the City of Stockton (City) and County of San Joaquin (County) are jointly submitting this FY 2016-17 Annual Report, in accordance with the National Pollutant Discharge Elimination System Permit (NPDES) and Waste Discharge Requirements (WDR) General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4) (General Permit), Part V.F.4. The report reflects all storm water activities conducted during FY 2016-17.

A copy was submitted to centralvalleysacramento@waterboards.ca.gov.

If you have any questions, please feel free to contact Jason Farnsworth, Stormwater Program Manager III, of City of Stockton at (209) 937-8155 or Jason.Farnsworth@stocktonca.gov or Brandon Nakagawa of San Joaquin County at (209) 468-3089 or BNakagawa@sjgov.org.

CITY OF STOCKTON
JOHN ABREW
DIRECTOR OF MUNICIPAL UTILITIES

COUNTY OF SAN JOAQUIN
BRANDON W. NAKAGAWA, P.E.
WATER RESOURCES COORDINATOR

JA:JF:mll

Attachment: (1) FY 2016-17 Annual Report

cc: Karen Ashby, Larry Walker Associates
Jason Farnsworth, City of Stockton
Ba T. Than, City of Stockton

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OCTOBER 2017

CITY OF STOCKTON & COUNTY OF SAN JOAQUIN

National Pollutant Discharge Elimination System

Municipal Stormwater Program

2016-2017 Annual Report

prepared by

LARRY WALKER ASSOCIATES

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CERTIFICATION

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 submitting false information, including the possibility of a fine and imprisonment for knowing violations. [40 CFR 122.22(d)]

Executed on the 28 day of September, 2017, at the City of Stockton.

JOHN ABREW

CITY OF STOCKTON

DIRECTOR OF MUNICIPAL UTILITIES

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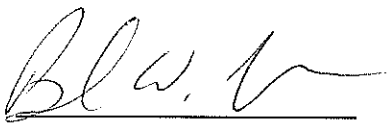
CERTIFICATION

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 submitting false information, including the possibility of a fine and imprisonment for knowing violations. [40 CFR 122.22(d)]

Executed on the 22 day of September, 2017, at the County of San Joaquin.



BRANDON W. NAKAGAWA, P.E.

COUNTY OF SAN JOAQUIN

WATER RESOURCES COORDINATOR

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1. Introduction

A Stormwater Management Plan (SWMP) was developed for and is being implemented within the jurisdictional limits of the City of Stockton (City) and the urbanized areas of San Joaquin County (County)[1] within the Phase I National Pollutant Discharge Elimination System (NPDES) permit area.2 The SWMP represents the strategy for controlling the discharge of pollutants from the municipal storm drain system to the Maximum Extent Practicable (MEP) and includes a wide range of Best Management Practices (BMPs).

Consistent with the third term municipal stormwater permit, the City and County submitted a Report of Waste Discharge (ROWD) and Proposed SWMP to the Central Valley Regional Water Quality Control Board (Regional Water Board) on June 6, 2012. In addition, in accordance with Provision II of the Monitoring and Reporting Program (MRP) (Order No. R5-2015-0024), the City and County submitted a request to the Regional Water Board for approval of an Alternative Monitoring Program[3] (AMP). The City and County also requested to participate in the Delta Regional Monitoring Program (Delta RMP) in lieu of conducting some of the local water quality monitoring. In 2015, the Regional Water Board Executive Officer approved both requests. As a result, the revised monitoring program was initiated during the 2015-2016 reporting period.

The fourth term, region-wide NPDES and Waste Discharge Requirements (WDR) General Permit for Discharges from Municipal Separate Storm Sewer Systems (MS4) (General Permit) was adopted June 23, 2016. The City and County submitted a Notice of Intent (NOI) application package in accordance with Part V.B.1 on November 1, 2016 and received the Notice of Applicability (NOA) from the Regional Water Board on November 30, 2016[4.] The NOI package included the applicable forms, a preliminary prioritization approach, and a Work Plan that outlines how the current SWMP and modifications thereto will be implemented until such time as a new SWMP is approved by the Regional Water Board.

In addition, on May 30, 2017, the City and County submitted their *Assessment and Prioritization of Water Quality Constituents in the Stockton Urbanized Area as well as the Preliminary Reasonable Assurance Analysis Outlin*e. The City and County met with the Regional Water Board in late June and will respond to the collective comments from Regional Water Board Permitting and Total Maximum Daily Load (TMDL) staff within a reasonable time period after they have been received.

The General Permit requires Annual Reports (Provision V.F.4), Mid-Term Reports, and End-Term Reports (Provision V.F.5). The Mid-Term and End-Term Reports serve as the Annual Report for the years submitted. Effectiveness assessments (Provision V.E.5) will be conducted as part of the Mid-Term and End-Term Reports. A summary of the annual reporting schedule is provided in **Table 1**.

[1] Also referred to as the Stockton Urbanized Area (SUA).

[2] The SWMP was approved by the Central Valley Regional Water Quality Control Board on October 9, 2009 (Resolution R5-2009-0105).

[3] The primary objective of the AMP is to focus on Pollutants of Concern (POCs) and implement an intensive monitoring approach to determine the source(s) of pollutants in urban discharges.

[4] City of Stockton Order No. R5-2016-0040-002; County of San Joaquin Order No. R5-2016-0040-003

Table 1. Annual Reporting Schedule (Due Oct 1)

Permit/Fiscal Year	Report Type & Reporting Period
Year 1 (2016-2017)	Annual Report (2016-2017)
Year 2 (2017-2018)	Annual Report (2017-2018)
Year 3 (2018-2019)	Mid-Term Report (2016-2019)
Year 4 (2019-2020)	Annual Report (2019-2020)
Year 5 (2020-2021)	End-Term Report (2016-2021)

The 2016-2017 Annual Report is being submitted in accordance with General Permit Provision V.F.4 and includes the items listed in **Table 2**.

Table 2. Annual Report Requirements

Report Requirement	Location in Annual Report
(a.i) A statement certifying that the Storm Water Management Program and Work Plan were implemented as approved.	Section 2
(a.ii) A summary of activities and tasks scheduled to be implemented in the upcoming year. If the Work Plan is still being implemented as described from the previous year, the Permittee may refer to the Work Plan.	Section 2
(a.iii) Any proposed minor modifications to the Storm Water Management Program; or any proposed Work Plan Modification.	Section 6
(a.iv) A completed certification statement, in accordance with the signatory requirements in Attachment H (Standard Permit Provisions and General Provisions).	Certification Statements
(c) Provision of water quality data collected.	Appendix C
(d) Additional requirements described in 40 CFR 122.42(c) (Attachment H, Standard Permit Provisions and General Provisions)	Certification Statements Section 3 Section 4 & Appendix B, D Section 5

2. Implementation Statement

The City and County have developed a comprehensive approach for managing the implementation of the stormwater program within the SUA and continue to implement the program consistent with the intent of the 2009 SWMP (and modifications thereto) and as described by the Work Plan submitted to (and as approved by) the Regional Water Board as a part of the NOI application package.

During 2016-2017, the City and County implemented the stormwater program within the SUA consistent with the intent of the 2009 SWMP and as outlined by the Work Plan submitted with the NOI package in November 2016 and included as **Appendix A**. In 2017-2018, the City and County will continue to implement the stormwater program with the SUA as outlined by this Work Plan.

3. Annual Expenditures and Projected Budget

The City and County assessed the current NPDES expenditures, as well as the projected expenditures for the next fiscal year. The City's fiscal analysis is provided in **Table 3**; the County's fiscal analysis is provided in **Table 4.**

Table 3. 2016-2017 Fiscal Analysis, City of Stockton

Program Element	Expenditures During Fiscal Year 2016-2017	Estimated Budget for Fiscal Year 2017-2018[a]
Program Management: Staff salaries, utility billing, phone charges, computer software/rentals, memberships, permit fees, indirect cost allocations, training, consultant contracts	$ 1,680,188	$ 1,964,664
Public Outreach: Staff salaries, industrial, commercial, and residential programs, including media and community events	$ 69,315	$ 89,294
Municipal Operations: Staff salaries, CIPs, and Storm Drain System Cleaning and Maintenance (includes Illicit Discharges, illegal connections mitigation, and clean-up)[b]	$ 3,010,371	$ 4,477,412
Industrial and Commercial: Staff salaries, inspections, and follow-up inspections[c]	$ 61,170[d]	$ 76,227[d]
Construction: Staff salaries, outreach	$ 61,170[d,e]	$ 76,227[d,e]
Planning and Land Development: Staff salaries	$ 93,875	$ 64,230
Water Quality Monitoring Programs: Includes Baseline Monitoring Program, Bioassessment Analysis, Dry Weather Field Screening, Smith Canal Bathymetry Study, Detention Basin Monitoring, BMP Effectiveness Study, Sediment Toxicity, Smith Canal/Mosher Slough Low DO13267 Letter Monitoring	$ 288,730	$ 385,596
Water Quality Based Programs: Includes Pesticide, Pathogen, Mercury, and DO Work Plans and Implementation	$ 63,299	$ 91,496
TOTAL	**$ 5,328,118**	**$ 7,225,146**

[a] Annually, the City breaks the overall budget down into individual Program Element expenditures. However, the methodology used to create a per-Program Element budgetary breakdown from year to year has varied. Thus, year-to-year budget comparisons may not result in "an apples-to-apples" comparison. The City is working on implementing a consistent methodology.

[b] Facility Pollution Prevention Plans (FPPPs) are paid for out of Public Works budget and are not a Stormwater Expense.

[c] The Industrial and Commercial Inspection Program is conducted in-house by Stormwater and Environmental Control Staff.

[d] The cost to develop a Websoft Inspection Tracking Database in 2016-2017 and the annual subscription costs for software projected for 2017-2018 are divided evenly between the Industrial/Commercial and Construction program elements.

[e] Business and Construction outreach expenditures are included in the Public Outreach budget.

The City's stormwater program is funded primarily by a storm drain maintenance or user fee. The fee is $2.10/month per Equivalent Residential Unit.

Table 4. 2016-2017 Fiscal Analysis, County of San Joaquin

Program Element	Expenditures During Fiscal Year 2016-2017	Estimated Budget for Fiscal Year 2017-2018
Program Management	$ 121,995	$ 279,996
Illicit Discharges	$ 14,528	$ 33,343
Public Outreach	$ 26,210	$ 60,156
Municipal Operations	$ 32,718	$ 75,092
Industrial and Commercial	$ 28,344	$ 65,054
Construction	$ 20,668	$ 47,436
Planning and Land Development	$ 10,610	$ 24,351
Water Quality Monitoring Program	$ 64,215	$ 147,382
Water Quality Based Programs	$ 5,441	$ 12,489
Program Implementation, Assessment, and Reporting	$ 137,375	$ 315,296
TOTAL	**$ 462,105**	**$ 1,060,595**

The County's funding sources are summarized in **Table 5.**

Table 5. 2016-2017 Funding Sources, County of San Joaquin

Source	Funding for Fiscal Year 2016-2017, by Percentage	Estimated Funding for Fiscal Year 2017-2018, by Percentage
Assessment Fee/Special District Fund (Fee $35/parcel)	78.63%	92.31%
Inspection/plan check fees	9.63%	3.99%
Miscellaneous Revenue – Interest Income	2.04%	0.45%
Operating Transfers	9.70%	3.24%

The County's stormwater program is funded primarily by a storm drain maintenance or user fees. The fee is $35/year per Equivalent Residential Unit.

4. Stormwater Quality Monitoring Program and Analysis of Monitoring Results

The General Permit requires monitoring of urban runoff and receiving waters per Provision V.E. In accordance with Provision II of the MRP (Order No. R5-2015-0024), the City and County submitted a request to the Regional Water Board for consideration and approval of an Alternative Monitoring Program (AMP).[5] The AMP is consistent with the proposed monitoring program from the Report of Waste Discharge,[6] meets the objectives of the MRP, directs resources to the most critical water quality issues, and collects data to support management decisions to address those issues.

The primary objective of the AMP is to focus on Pollutants of Concern (POCs) and implement an intensive monitoring approach to determine the source(s) of pollutants in urban discharges. In addition to the AMP, the City and County requested to participate in the Delta Regional Monitoring Program (Delta RMP) in lieu of conducting some of the local water quality monitoring.

In 2015, the Regional Water Board Executive Officer approved the City and County' AMP[7] (hereafter referred to as the stormwater quality monitoring program, or monitoring program) and participation in the Delta RMP.[8] As a result, the revised monitoring program was initiated during the 2015-2016 reporting period. In addition, the AMP will continue to be implemented and will form the basis of the monitoring program that will be submitted as a part of the SWMP that is required by Order numbers R5-2016-0040-002 and R5-2016-0040-003.

The monitoring program is a focused effort conducted within six key water bodies on a rotating basis. The schedule for the staggered waterbody monitoring is shown in **Table 6**. Monitoring during 2015-2016 occurred on Mosher Slough and was reported on in the *2015-2016 Stormwater Management Program Annual Report*. During 2016-2017, monitoring occurred on the Calaveras River.

[5] City of Stockton and County of San Joaquin. Submittal of Alternative Stormwater Monitoring Program (Order No. R5-2015-0024). June 10, 2015.

[6] National Pollutant Discharge Elimination System Municipal Stormwater Program – *Report of Waste Discharge & Proposed Stormwater Management Plan*, June 2012 (Section 2.7; Tables 2-42, 2-43, 2-44, 2-45, 2-46, and 2-47).

[7] Central Valley Regional Water Quality Control Board. Approval of City of Stockton and County of San Joaquin's 27 October Alternative Monitoring Program. 4 November 2015.

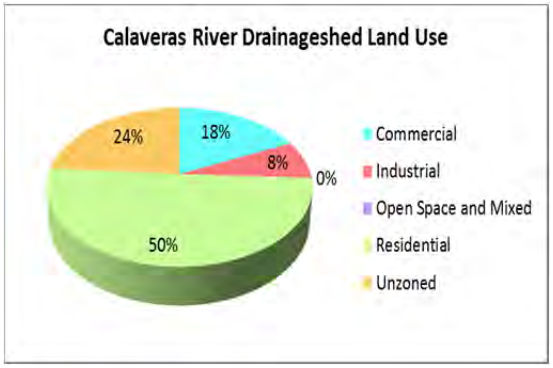
[8] Central Valley Regional Water Quality Control Board. Approval to Allow the City of Stockton and County of San to Reduce Local Water Quality Monitoring and Participate in the Delta Regional Monitoring Program. 4 November 2015.

Table 6. Staggered Waterbody Monitoring

Waterbody	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Mosher Slough[a]						
Calaveras River[a]						
Duck Creek[a]						
Smith Canal[a]						
Mormon Slough						
Five-Mile Slough						

[a] Historic monitoring location.

4.1 WATERBODY AND DRAINAGESHED MONITORING



The Calaveras River drainageshed[9] is a tributary to the San Joaquin River (SJR) Delta System flowing southwest from the Sierra Nevada foothills through Calaveras, Stanislaus, and San Joaquin Counties and drains approximately 470 square miles. Within the SUA, land use along the Calaveras River is predominantly residential and commercial, but also includes some industrial uses. In addition to urban runoff, the Calaveras River receives upstream agricultural flows from the Stockton Diversion Canal and "old" Calaveras channel.

Monitoring sites are shown in **Figure 1**. The constituents monitored at each site are identified in **Table 7**.

- The full list of constituents (**Table 12**) is monitored at the historic locations, CR-46 and CR-46R.
- Monitoring at the other locations is focused on the POCs within the Calaveras River drainageshed, which include:
    - Indicator bacteria (*E. coli* and fecal coliform);
    - Pesticides (chlorpyrifos and pyrethroids);
    - Mercury; and
    - Dissolved oxygen (DO).

[9] Department of Water Resources, *Calaveras River Fish Migration Barriers Assessment Report*, September 2007.

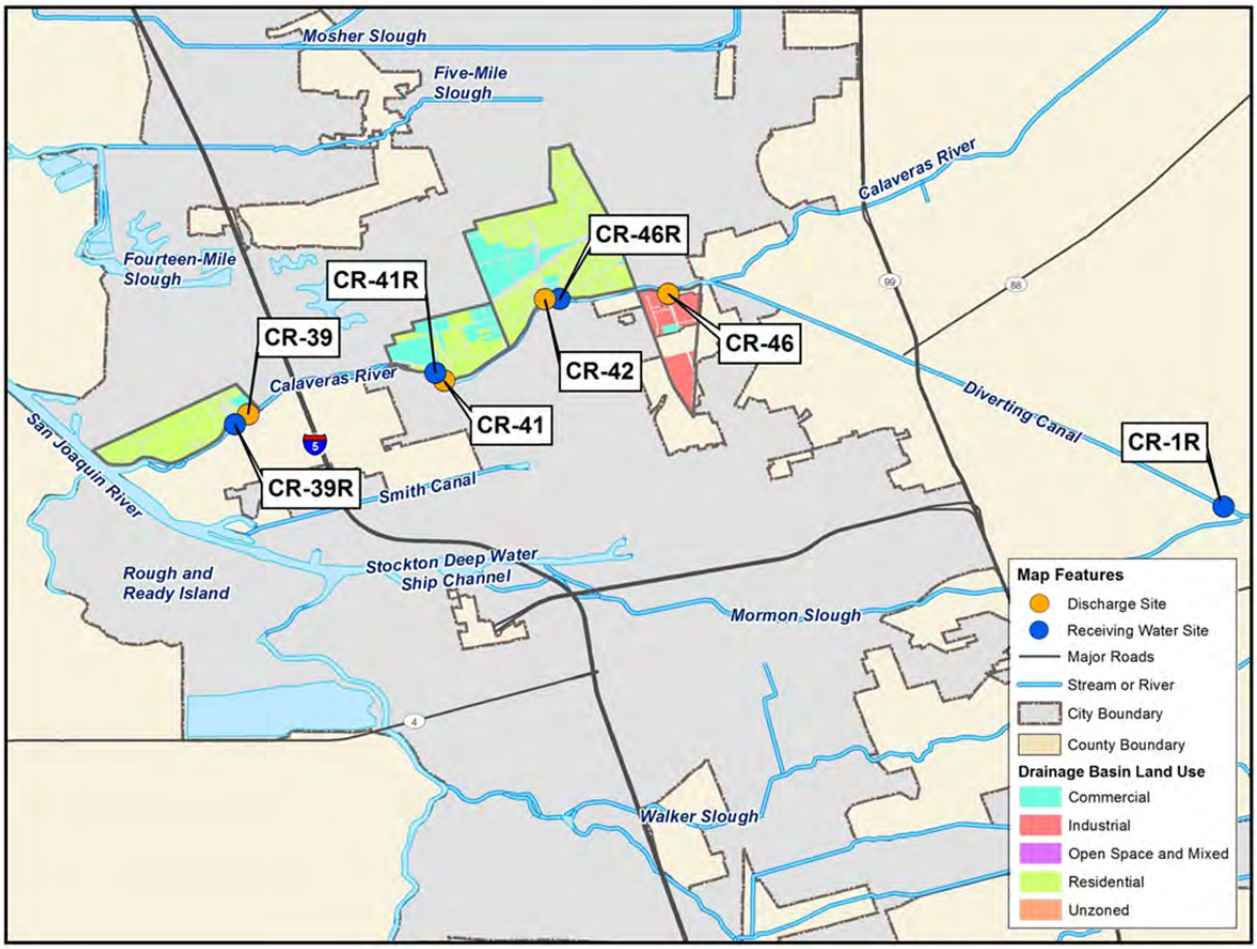


Figure 1. Calaveras River Monitoring Sites and Discharge Site Drainagesheds

Table 7. Calaveras River Monitoring Sites and Constituents Monitored

Constituents Monitored	Type of Monitoring	Sites Monitored							
		CR-1R	CR-46[a]	CR-46R[a]	CR-42	CR-41	CR-41R	CR-39	CR-39R
Full suite of constituents (**Table 12**)	Water quality		C	G					
E. coli & fecal coliform	Water quality	G			G	G	G	G	G
Chlorpyrifos and pyrethroids	Water quality	G			G	G	G	G	G
Mercury (and methylmercury)	Water quality	G			G	G	G	G	G
DO & biological oxygen demand (BOD)	Water quality	G			G	G	G, S	G	G, S
Sediment toxicity and sediment chemistry[b]	Sediment			Sed[c]					
Water column toxicity	Water column			G					

Notes:
G = Grab
C = Composite
Sed = Sediment
S = Sonde

[a] Historic Monitoring Site

[b] Follow-up testing of sediment chemistry will be performed if toxicity is determined to be statistically significant and a greater than or equal to 50% increase in Hyalella azteca mortality is observed.

[c] For sediment toxicity and chemistry sampling, this station is located 250' downstream of CR-46.

Monitoring activities completed during 2016-2017 are summarized in **Table 8**. Monitoring efforts and results for these POCs are presented in the following sections.

Table 8. 2016-2017 Monitoring Program Accomplishments

Monitoring Program Activity	Status
Waterbody/Drainageshed Monitoring (Section 4.1)	
Outfall and Receiving Water Monitoring (Section 4.1.2)	• 4 wet weather events monitored at 4 urban discharge and 3 receiving water sites • 4 dry weather events monitored at 4 urban discharge and 3 receiving water sites • 3 wet weather events and 2 dry weather events monitored at 1 upstream site
Rainwater/Atmospheric Deposition Monitoring (Section 4.1.3)	• Rainwater monitored at 3 locations during 4 wet weather events
Sediment Toxicity and Sediment Chemistry (Section 4.1.4)	• 1 wet weather event and 2 dry weather events monitored for sediment toxicity at the historic monitoring location
Water Column Toxicity (Section 4.1.5)	• 1 wet weather event and 1 dry weather event monitored at the historic monitoring location

4.1.1 Storm Tracking and Selection

Monitoring[10] of stormwater runoff is a key component of the monitoring program and requires a high level of coordination of equipment and field crews. Incoming storms are tracked and assessed against storm selection criteria (e.g., amount of precipitation, days since last rain event, duration of event) and the forecasted reliability that the storm will occur in the SUA. Wet weather monitoring is particularly challenging in the SUA, as rainfall forecasts are often unreliable due to the convective nature of incoming storms. In addition, because storms normally intersect Stockton traveling from the west to the east, it is not unusual for northern Stockton to receive substantial rainfall, while southern Stockton remains dry, or vice versa.

Wet weather events are timed to capture urban runoff impacts with the highest possible representation of the targeted storm event (i.e., high percent capture), using flow-based composite samplers at urban discharge stations when possible. Grab sampling techniques, which are, when feasible, conducted near the peak of storm event hydrographs, are used at all receiving water stations. Due to standard method requirements, grab sampling is used for the following constituents when monitored:

- Oil and grease;
- Indicator bacteria;
- Pesticides; and
- Mercury/methylmercury.

The daily total rainfall at the Stockton Metro Airport[11] during the 2016-2017 monitoring year is shown in **Figure 2**. The total cumulative seasonal rainfall is also shown (compared to the historic average[12]), as well as the timing of monitoring events. Historic average annual rainfall at the Stockton Metro Airport is 14 inches. The 2016-2017 monitoring year had above average precipitation with 21.62 inches of rain, which is 155% of historic annual rainfall. Although the 2016-2017 wet season was wetter than average, the California Department of Water Resources classified the 2016 water year (ending September 30, 2016) as “dry” for the San Joaquin Valley.11 The 2017 water year classification is still to be determined.

[10] The Regional Permit defines the “monitoring year” as October 1 – September 30. Monitoring events are reported for the fiscal year, due to the time needed for data reporting and processing.

[11] https://cdec.water.ca.gov/cgi-progs/queryCSV?station_id=SOC&sensor_num=45&dur_code=D&start_date=7%2F1%2F2016&end_date=6%2F30%2F2017&data_wish=View+CSV+Data

[12] Based on 1981-2010 data. http://www.cnrfc.noaa.gov/awipsProducts/RNOWRKCLI.php

[11] http://cdec.water.ca.gov/cgi-progs/iodir/WSIHIST

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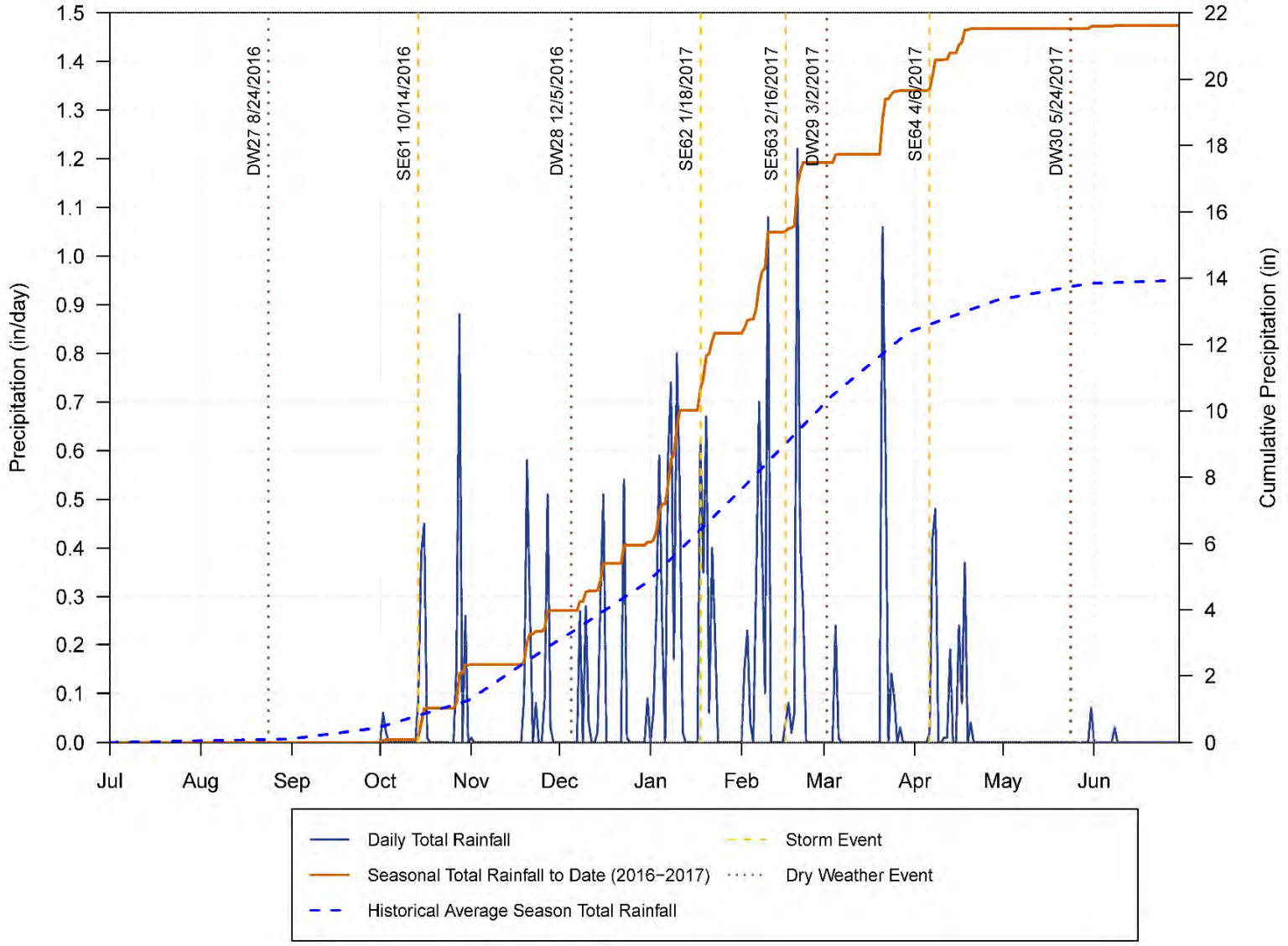

Figure 2. 2016-2017 Precipitation at Stockton Metro Airport and Captured Monitoring Events

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Details of 2016-2017 Wet Weather Monitoring Events

Each monitoring event is unique in terms of the antecedent weather conditions, flow in the receiving waterbody, field conditions, etc. Runoff quality is particularly influenced by the amount and intensity of rainfall and time of sampling with respect to the rainfall hydrograph. The conditions for wet weather events conducted during 2016-2017 are summarized in **Table 9**.

Table 9. Details of 2016-2017 Wet Weather Monitoring Events

Storm Events[a, b]	SE61 10/14/2016	SE62 1/18/2017	SE563 2/16/2017	SE64 4/6/2017
Time of first rain	15:15	5:55	5:40	14:05
Time of last rain	21:45	21:45	6:55	20:55
Total rain (in)	0.39	0.94	0.04[c]	0.32
Antecedent Conditions				
Date of last precipitation	10/03/2016	1/12/2017	2/10/2017	3/27/2017
Date of last storm > 0.1in	5/6/2016	1/11/2017	2/10/2017	3/24/2017
Days since last storm	161	7	6	13
Date of last storm > 0.25in	5/6/2016	1/11/2017	2/10/2017	3/22/2017
Days since last storm	161	7	6	15
Cumulative rainfall to date (in)	0.17	10.64	15.42	19.68

[a] Precipitation data is collected at the Stockton Metro Airport, and is available at: http://mesowest.utah.edu/cgi-bin/droman/download_ndb.cgi?stn=KSCK&year1=2014&day1=19&month1=6&hour1=&timetype=LOCAL&unit=0

[b] Per the AMP approved by the Regional Board, rainfall events of 0.15''- 0.25'' are targeted for the monitoring program.

[c] The forecast prior to and during the storm fit the criteria for a qualifying event, but rainfall at the Airport gauge did not meet the criteria. Central Stockton typically receives higher rainfall than the Airport, and discharge was flowing in to all pump stations during the event.

4.1.2 Outfall and Receiving Water Monitoring

The monitoring program includes urban discharge outfall and receiving water monitoring. Urban discharge outfall monitoring characterizes the quality of urban runoff discharged from four storm drain outfalls along the Calaveras River. In addition, receiving water monitoring characterizes the quality of the receiving waters within the SUA. Three receiving water sites were sampled downstream of the urban discharge sites. The co-located sites are used to help determine if the urban discharge is causing or contributing to exceedances of applicable water quality objectives.

One additional upstream site (upstream of the SUA boundary) was sampled in order to characterize the quality of water entering the SUA. The upstream receiving water site is intended to be as close to the boundary of the SUA as possible.

Monitoring sites that were sampled in 2016-2017 are shown in **Table 7**.

- Urban discharge sites are labeled with a station and number code (e.g., CR-46).
- Receiving water sites are labeled with an "R" for receiving water (e.g., CR-46R).

The outfall and receiving water monitoring sites and predominant land uses are summarized in **Table 10.**

Table 10. 2016-2017 Outfall and Receiving Water Monitoring Sites on Calaveras River

Site Type	Station ID	Monitoring Site Description	Predominant Land Use	Drainage Area (acres)
Urban Outfall	CR-46	West Lane Pump Station (southeast side of Calaveras River at West Lane Bridge)	Industrial with mixed commercial/ residential	230
	CR-42	El Dorado Street/Brookside Pump Station (north side of Calaveras River)	Residential/ Commercial	844
	CR-41	Pershing Avenue/Brookside Pump Station (north side of Calaveras River)	Residential/ Campus/ Commercial	310
	CR-39	Brookside Estates Pump Station (north side of Calaveras River)	Upscale Residential with minor commercial	297
Receiving Water	CR-46R	Calaveras River at El Dorado Bridge	Industrial with mixed commercial/ residential	NA
	CR-41R	Calaveras River downstream of CR-41 Pump Station	Residential/ Campus/ Commercial	NA
	CR-39R	Calaveras River downstream of CR-39 Pump Station	Upscale Residential with minor commercial	NA
Upstream Receiving Water	CR-1R	Stockton Diverting Canal (north side of South Main Street Bridge)	Agriculture/rural residential	NA

NA = Not Applicable

Monitoring is generally conducted during three wet weather events and four dry weather events each year. During 2016-2017, monitoring was completed at each urban discharge and receiving water site four[13] times during the wet season and four times during the dry season. The timeline of the events is shown in **Figure 2**. The sites that were sampled during each event are listed in **Table 11**. Wet weather events (labeled "SE" for storm event) and dry weather events (labeled "DW" for dry weather) are numbered sequentially from the initiation of monitoring wet weather and dry weather events (in 1992 and 2004, respectively).

Table 11. Sites Sampled and Type of Sample Collected in 2016-2017

Site Type	Station ID	DW27 8/24/16	SE61 10/14/16	DW28 12/5/16	SE62 1/18/17	SE63[a] 2/16/17	DW29 3/2/17	SE64 4/6/17	DW30 5/24/17
Urban Discharge	CR-46[b]	G	G	G	G	G	G	G	G
	CR-42	G	G	G	G	G	G	G	G
	CR-41	G	G	G	G	G	G	G	G
	CR-39	G	G	G	G	G	G	G	G
Receiving Water	CR-46R	G	G	G	G	G	G	G	G
	CR-41R[c]	G	G, S	G, S	G, S	G, S	G	G, S	G, S
	CR-39R	G	G, S	G, S	G	G, S	G, S	G, S	G, S
Upstream Receiving Water	CR-1R	NS	NS	NS	G	G	G	G	G

Notes:

C = Composite
G = Grab
S = Sonde
NS = Not sampled due to lack of representative upstream flow / dry channel.

[a] A subset of constituents was monitored during this event for a separate monitoring program. The analyses included: *E. Coli*, Fecal Coliform, BOD, DO, TSS, and field measurements.

[b] Grab samples were collected during all events. The composite sampler had technical and mechanical issues, including communication problems (compiler error with the unit), and refrigerator hardware malfunction. The composite sampler will be replaced with newer equipment for the upcoming storm season.

[c] Sonde data were collected upstream, at the CR-42R location (downstream of CR-42).

Monitored Constituents and Analytical Methods

The constituents and corresponding analytical methods for urban discharge and receiving water monitoring are in accordance with the Method Detection Limits (MDLs) that are specified in the monitoring program. During the 2016-2017 events, samples at the historic sites (CR-46 and CR-46R) were analyzed for the constituents shown in **Table 12**. Samples at all other sampling locations on the Calaveras River were analyzed for a targeted set of constituents, based on POCs identified in the 2012 ROWD, as shown in **Table 7**.

[13] One additional wet weather event was conducted for a limited set of constituents to satisfy another monitoring program. However, the results are also reported here.

Table 12. Constituent Analysis for Outfall and Receiving Water Monitoring at Historic Sites

Constituents	Method Detection Limits (MDLs)	WQO(s)	WQO Source
Conventional Pollutants	**mg/L**		
Oil and Grease	5	None	Basin Plan[a]
pH	0-14	6.5-8.5	Basin Plan
Dissolved Oxygen	Sensitivity to 5 mg/L	>5-6[b]	Basin Plan
Field Measurements			
Date	mm/dd/yyyy	--	--
Sample Time	hr:min (regular time)	--	--
Weather	degrees F	--	--
Water Temperature	degrees C	--	--
Bacteria	**MPN/100 mL**		
Fecal coliform	<20	400	Basin Plan
E. coli	<20	235[c]	Basin Plan
General	**mg/L**		
Turbidity	0.1 NTU	--	--
Total Suspended Solids	2	--	--
Total Dissolved Solids	2	--	--
Total Organic Carbon	1	--	--
Biochemical Oxygen Demand	2	--	--
Chemical Oxygen Demand	20-900	--	--
Total Kjeldahl Nitrogen	0.1	--	--
Alkalinity	2	--	--
Total Ammonia-Nitrogen	0.1	--	--
Specific Conductance	1 µmhos/cm	700/1,000[d]	Bay-Delta WQ Plan[e]
Total Hardness	2	--	--
Metals	**µg/L**		
Aluminum, Dissolved	50	750	EPA Ambient WQ[f]
Aluminum, Total	50	200	Secondary MCL[g]
Copper, Dissolved	0.5	Hardness-dependent	CTR[h]
Copper, Total	0.5	Hardness-dependent	CTR
Iron, Total	100	300	Secondary MCL
Lead, Dissolved	0.5	Hardness-dependent	CTR
Lead, Total	0.5	Hardness-dependent	CTR
Mercury, Total	0.5 ng/L	--	--
Methylmercury, Total	0.05 ng/L	--	--
Zinc, Total	1	Hardness-dependent	CTR
Pesticides	**ng/L**		
Chlorpyrifos	10	15	Basin Plan
Diazinon[i]	50	100	Basin Plan
Pyrethroids	5	--	--

[a] Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.
[b] The WQO is >6 mg/L September 1 – November 30.
[c] Stockton Urban Waterbodies Pathogen TMDL single sample maximum water quality target.
[d] The WQO is a maximum 30-day average of 700 µmhos/cm April – August, and 1,000 µmhos/cm September – March.
[e] Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.
[f] United States Environmental Protection Agency Recommended Ambient Water Quality Criteria.
[g] United States Environmental Protection Agency Secondary Maximum Contaminant Level.
[h] 40 C.F.R. Section 138.38(b) California Toxics Rule.
[i] Diazinon is monitored only at Rainwater/Atmospheric Deposition stations.

All waterbody/drainageshed monitoring results are included in **Appendix B**, which contains the following information:

- Sample location
- Station type (urban discharge [UD] or receiving water [RW])
- Sampling method (composite or grab)
- Sample date and time
- Sample result
- MDLs
- Reporting Limits (RLs)
- Data qualifiers
- Comparison to the lowest applicable water quality objective (WQO)
- The name of the analyzing laboratory

For analyses that were non-detect (ND), the value is reported as less than the MDL where the MDL is provided by the lab; otherwise, the value is reported as less than the RL.

Monitoring results for the constituents identified as water quality POCs for the Calaveras River are presented graphically to provide an overview of the characterization of the Calaveras River:

- *E. coli* and fecal coliform (**Figure 3**);
- Chlorpyrifos (**Figure 4**) and pyrethroids (**Figure 5**)
- Total Mercury and Total Methylmercury (**Figure 6**); and
- Dissolved oxygen – grab sample data (**Figure 7**) and sonde data (**Figure 8**).

Data for the POCs are summarized in tables in Appendix C. A complete assessment of monitoring results from the Calaveras River within the context of all monitored waterbodies, including data from the historic monitoring locations and an assessment of trends, will be provided in the End-Term Report. For this report, general observations are provided below:

- *E. coli* are a more appropriate indicator for risk to human health, as noted in the 2012 United States Environmental Protection Agency Recreational Water Quality Criteria,[14] and the State Water Board's 2017 draft Bacteria Provisions.[15] *E. coli* concentrations in receiving water sites are below the WQO in almost all samples, but showed occasional exceedances at discharge sites. As is typical, indicator bacteria are generally higher during storm events than during dry weather events.
- Chlorpyrifos concentrations were all below the WQO, and were frequently non-detect, except for the first storm sample (SE61) at discharge site CR-41.

[14] United States Environmental Protection Agency. 2012. Recreational Water Quality Criteria. Office of Water, 820-F-12-058.

[15] http://www.waterboards.ca.gov/bacterialobjectives/docs/draft_provisions.pdf

- Pyrethroids
  - Few pyrethroids were detected in the upstream monitoring location.
  - All pesticides were more frequently detected during storm events than during dry weather events.
  - A higher number of individual pyrethroid compounds, and higher concentrations of pyrethroids, were detected in discharge samples than receiving water samples.
    - Samples at location CR-42 had the greatest number of individual pyrethroids.
    - Samples from both CR-42 and CR-41 had higher concentrations than the other discharge locations.
  - One instance of an unusually high concentration of cyfluthrin (1,300 ng/l) was observed in a receiving water sample at CR-46R during SE64, where the concentration in the associated discharge location was over three orders of magnitude lower, and where cyfluthrin was not detected in the upstream receiving water location nor in any rainwater samples (rainwater monitoring is described in **Section 4.1.3**).
- Mercury concentrations at the upstream location were similar to the receiving water locations within the SUA. Concentrations at all sites were similar between storm events and dry weather events.
- Dissolved oxygen (DO)
  - DO concentrations were appropriately above the minimum WQO in all receiving water grab samples. Concentrations in discharge samples were lower during storm events than during wet weather events. Concentrations below the minimum WQO were observed during dry weather events at CR-42, and during the first dry weather event at CR-46 and CR-39.
  - DO sonde data were generally above the WQO at both the upstream (CR-42R) and downstream (CR-39R) locations. Excursions below the WQO occurred more frequently in the upstream location, and DO concentrations appeared to be lowest toward the end of October.

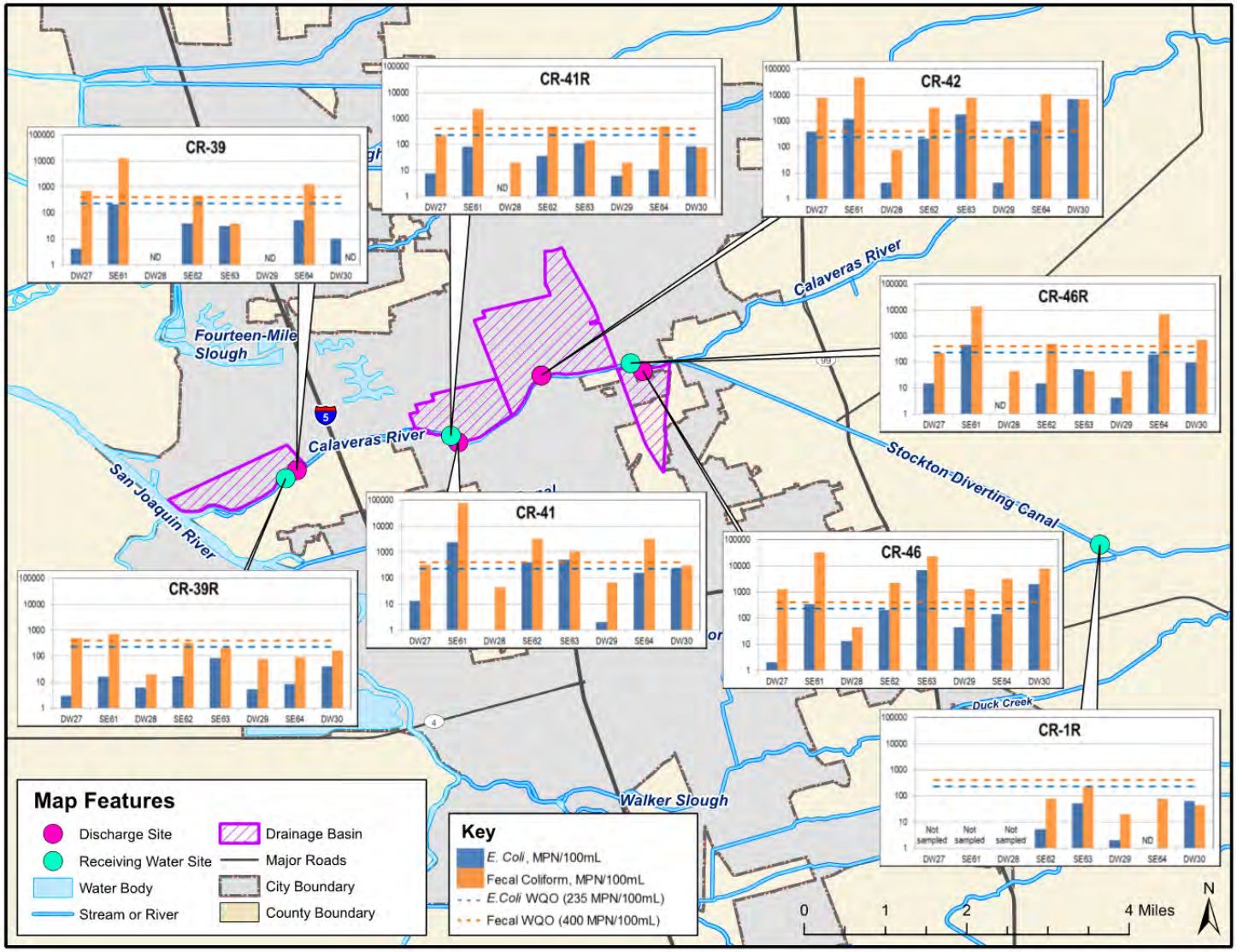

Figure 3. Calaveras River 2016-2017 *E. coli* and Fecal Coliform Concentrations (MPN/100 mL)

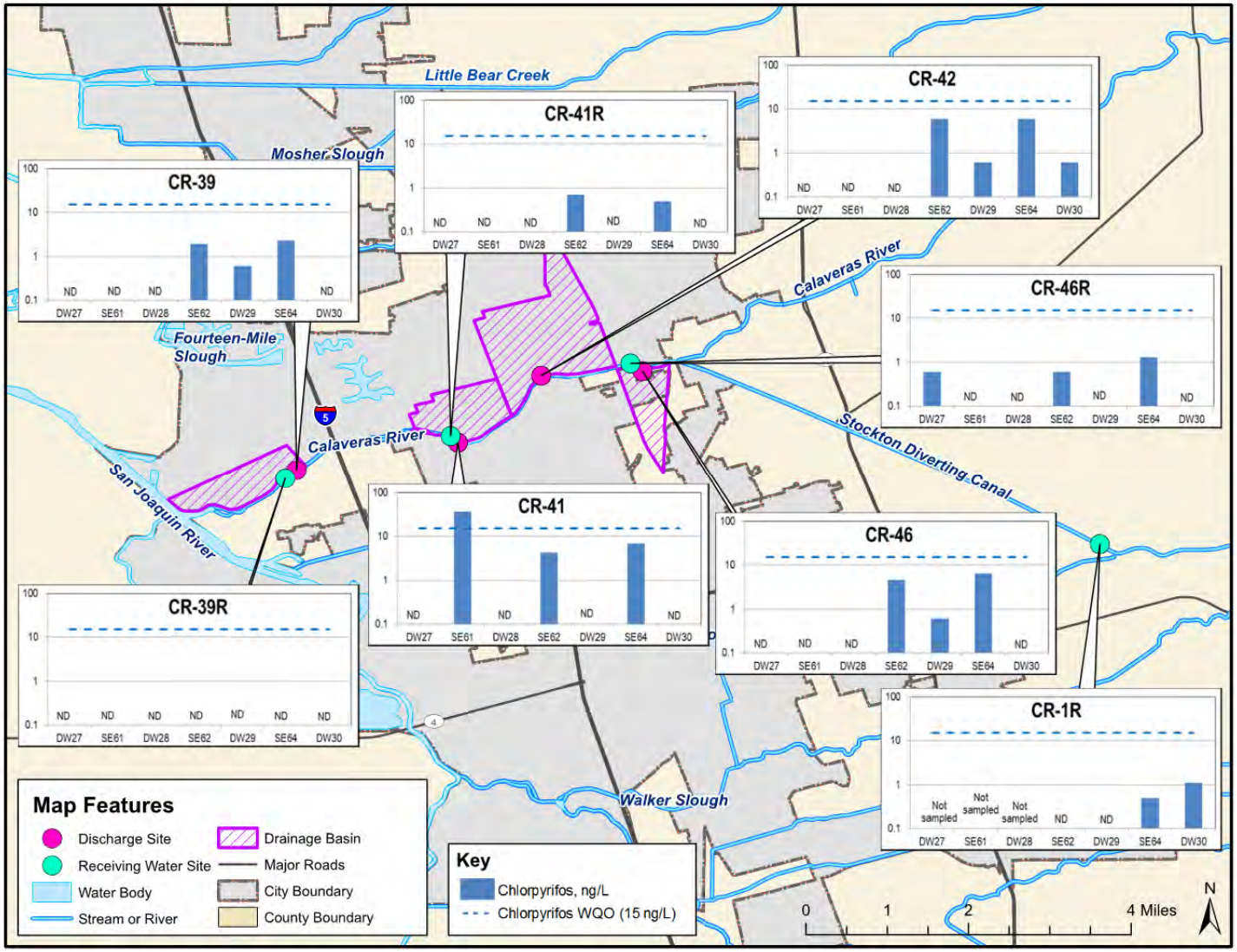

Figure 4. Calaveras River 2016-2017 Chlorpyrifos Concentrations (ng/L)

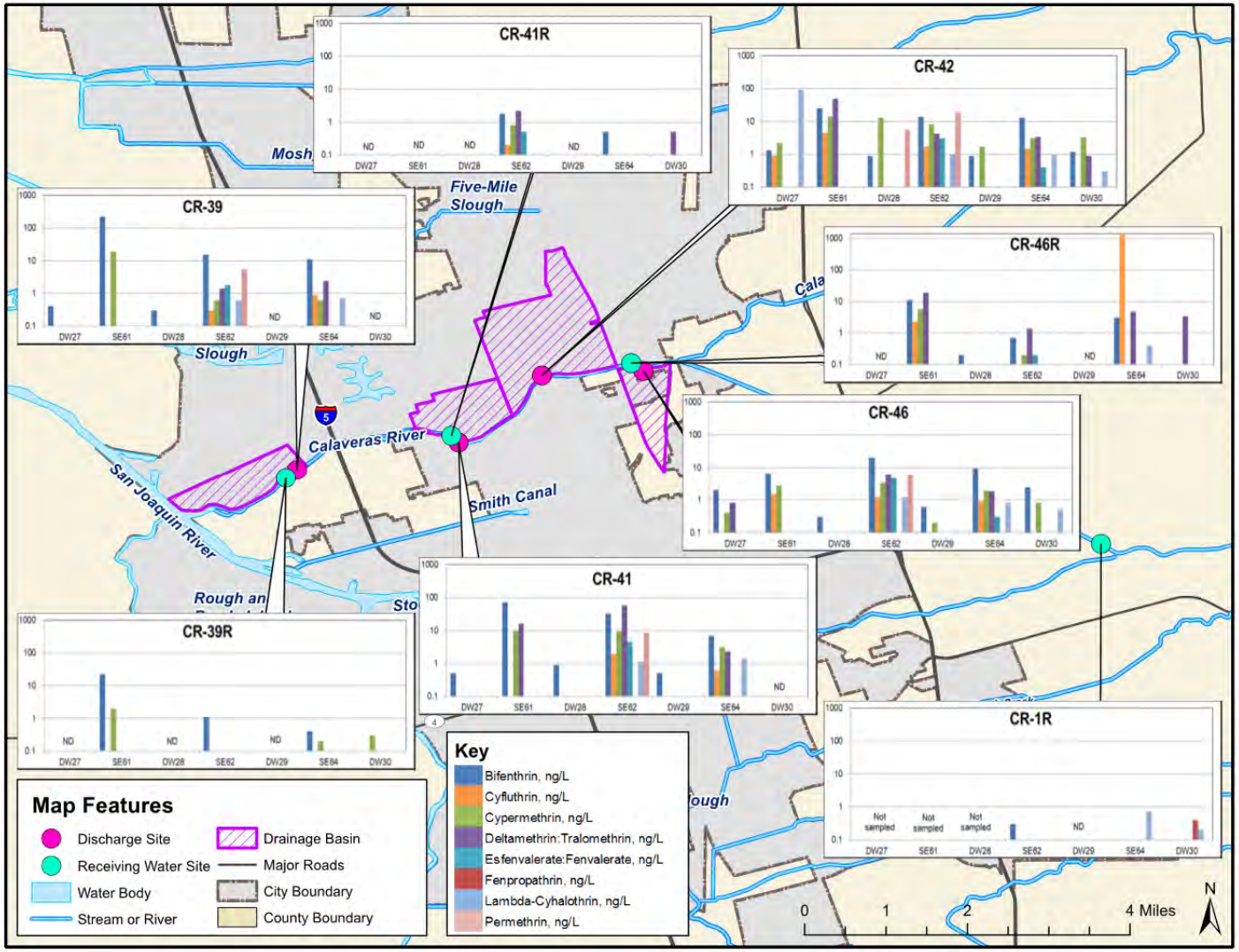

Figure 5. Calaveras River 2016-2017 Pyrethroid Concentrations (ng/L)

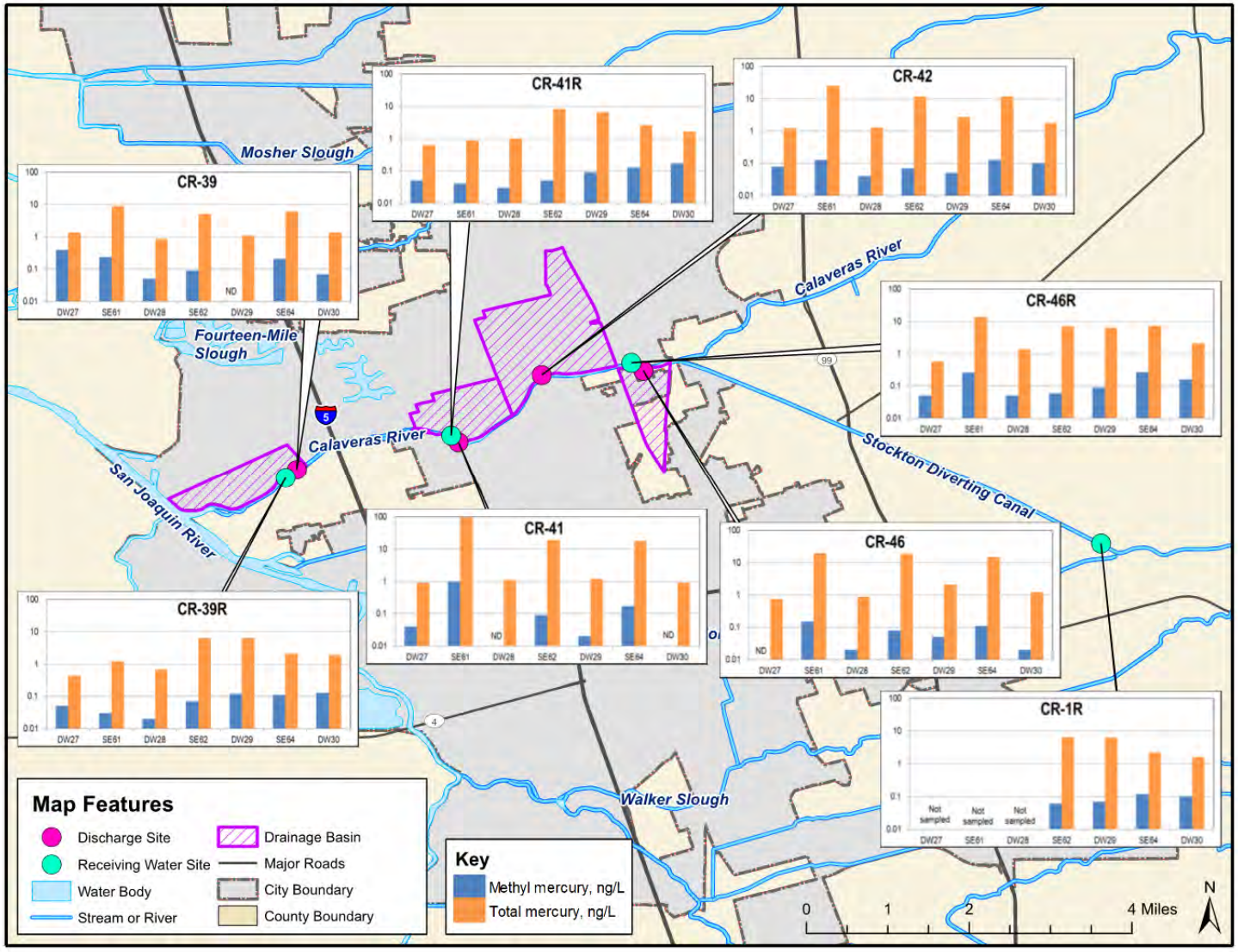

Figure 6. Calaveras River 2016-2017 Total Mercury and Total Methylmercury Concentrations (ng/L)

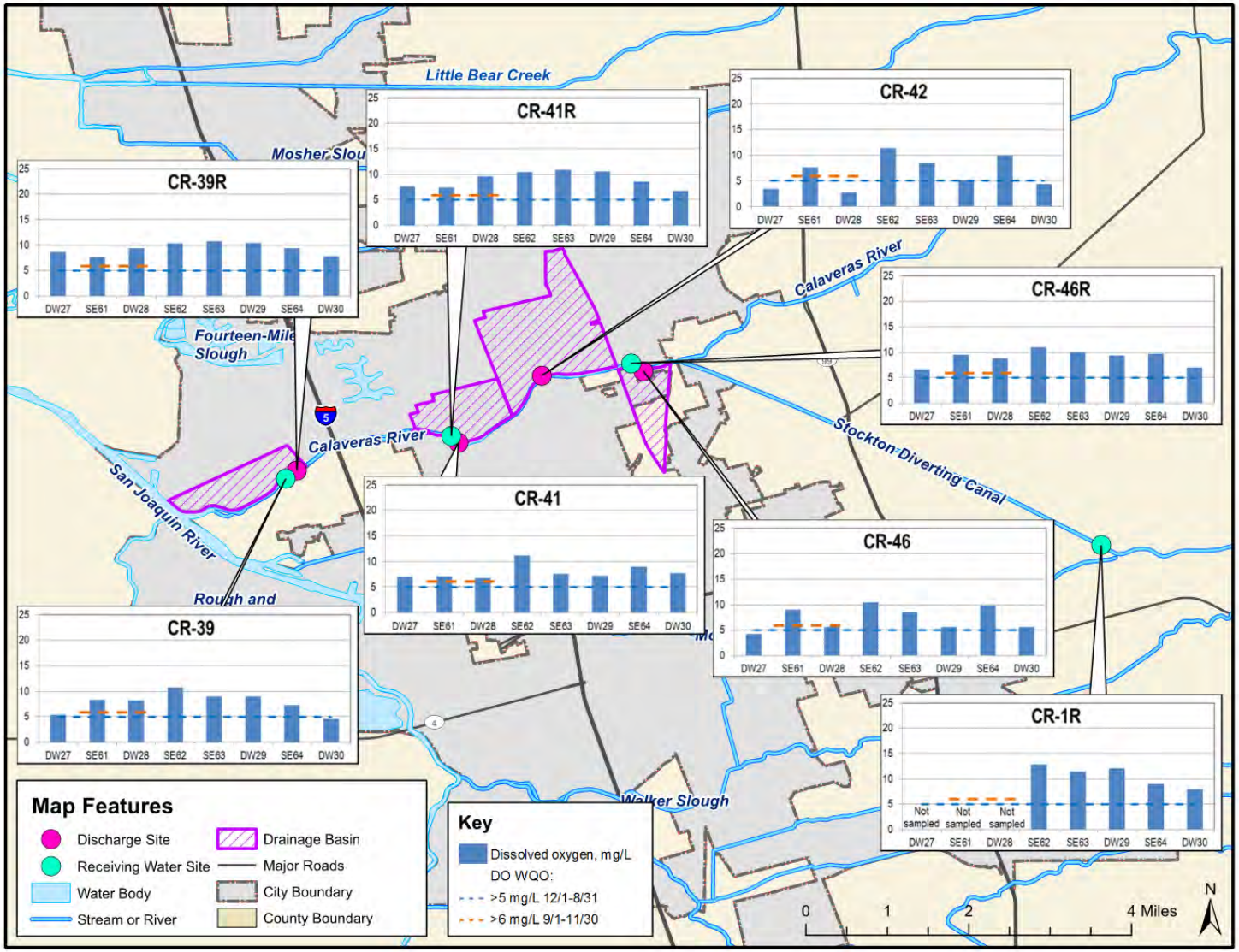

Figure 7. Calaveras River 2016-2017 Dissolved Oxygen Concentrations (mg/L)

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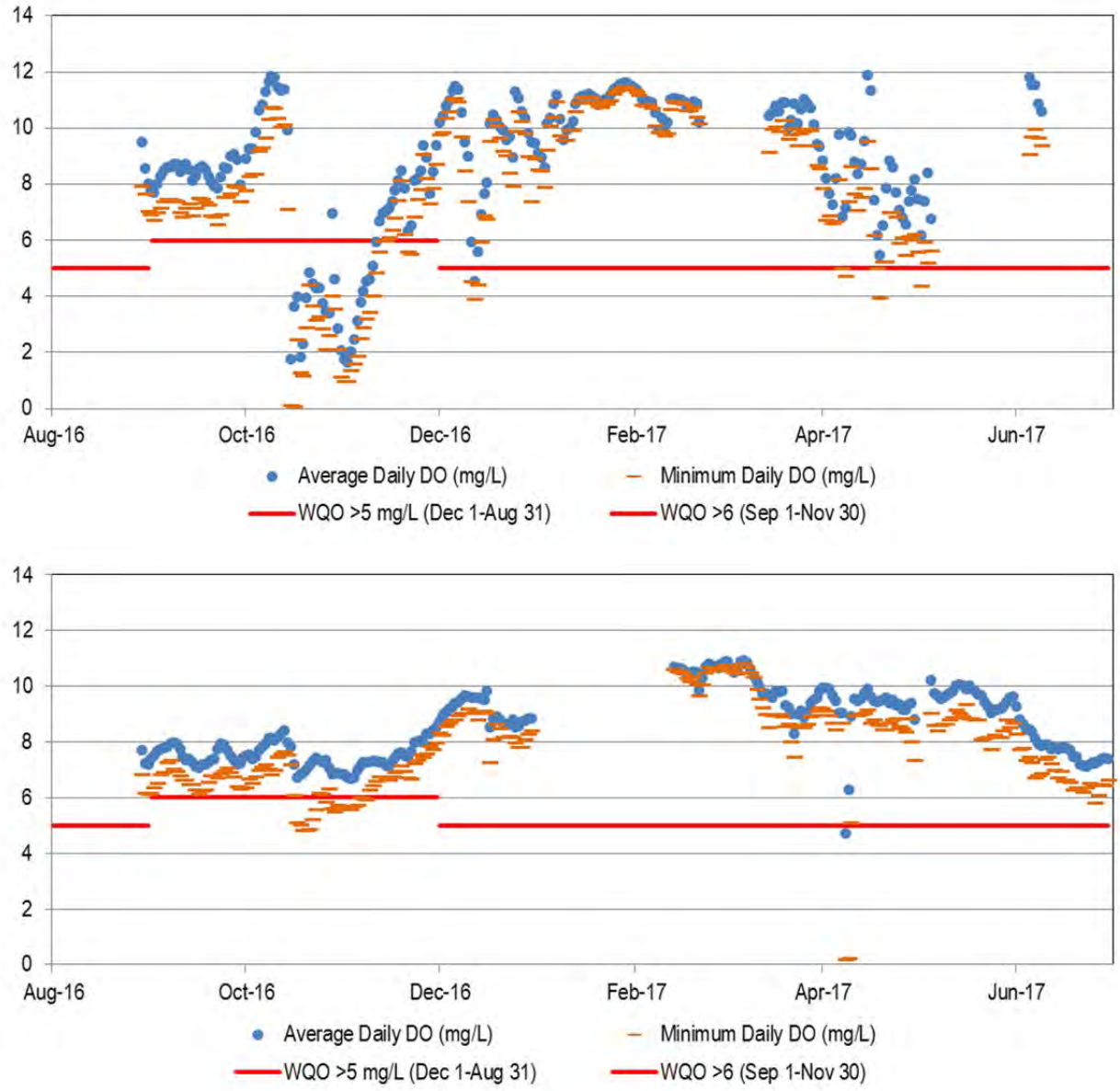

Figure 8. Continuous Sonde Data for Dissolved Oxygen at (top) CR-42R (upstream) and (bottom) CR-39R (downstream)

4.1.3 Rainwater/Atmospheric Deposition Monitoring

During 2016-2017, rainwater/atmospheric deposition was monitored for mercury (total mercury and total methylmercury) and pesticides (chlorpyrifos and pyrethroids) at three representative locations in the SUA. Diazinon was monitored at the NW-Rain location, in addition to chlorpyrifos and pyrethroids. The three locations are shown in **Figure 9**.

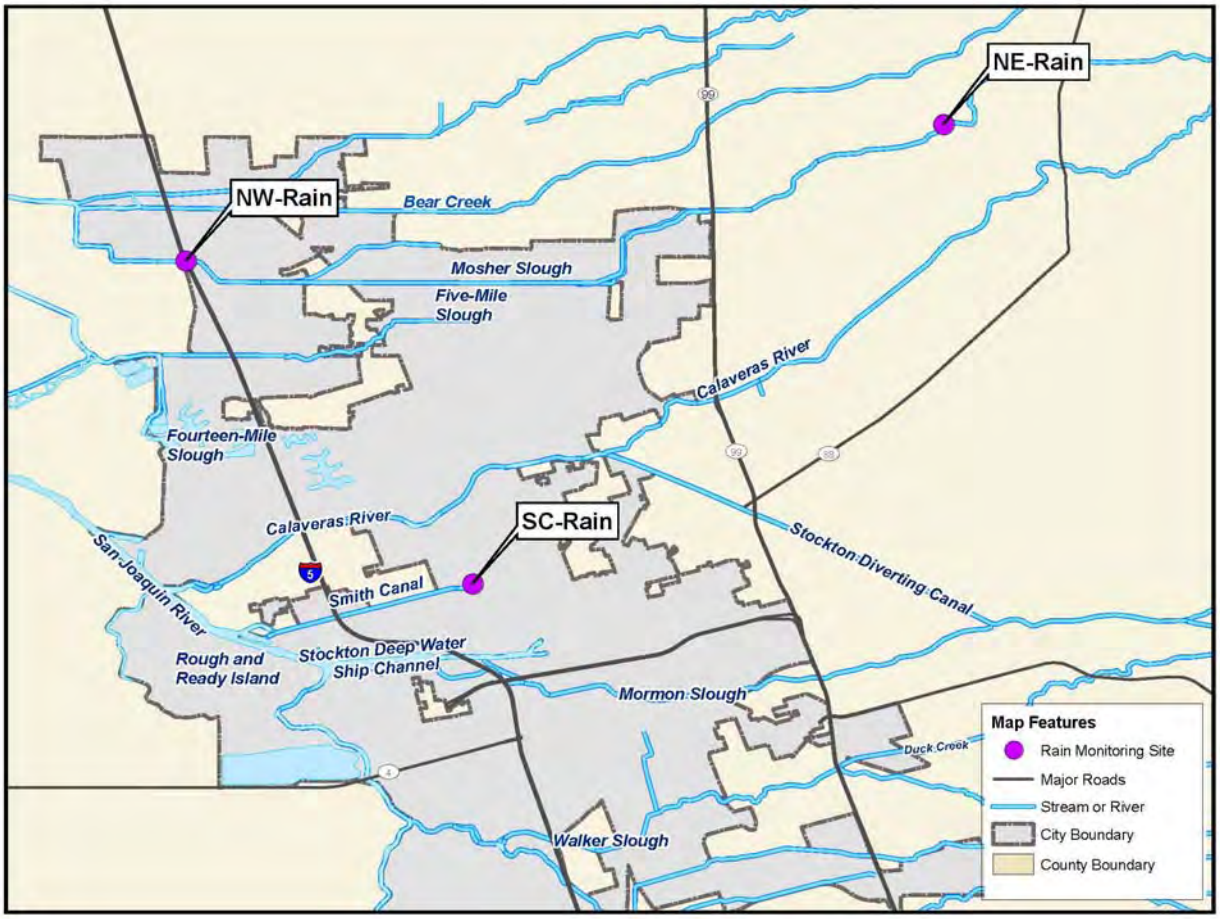

Figure 9. Rainwater/Atmospheric Deposition Monitoring Locations

The monitoring sites include the following:

- NW-Rain – Located along Mosher Slough in the northwest corner of the SUA. This site has been historically monitored for the Pesticide Plan. The site is representative of atmospheric deposition generated within and outside of the SUA.
- NE-Rain – Located along Mosher Slough outside of the SUA, to the northeast. This site has been historically monitored for the Pesticide Plan. The site is representative of atmospheric deposition generated outside of the SUA.
- SC-Rain – Located at the Legion Park Pump Station, in the center of the SUA. This site is representative of atmospheric deposition that is generated within the SUA.

During 2016-2017, rainwater was monitored at all three sites during all four storm events that were sampled for the outfall and receiving water monitoring. Monitoring results are shown in **Figure 10**.

General observations are summarized below:

- Total mercury and methylmercury concentrations were similar at all three locations, and were similar in magnitude to the concentrations observed in urban runoff and receiving water samples.
- Pesticides:
    - Organophosphate (OP) pesticides were detected in most samples, and chlorpyrifos was frequently detected at concentrations close to the WQO.
    - Pyrethroids were most frequently detected at the NE and Smith Canal rainwater locations, with the most individual compounds detected.

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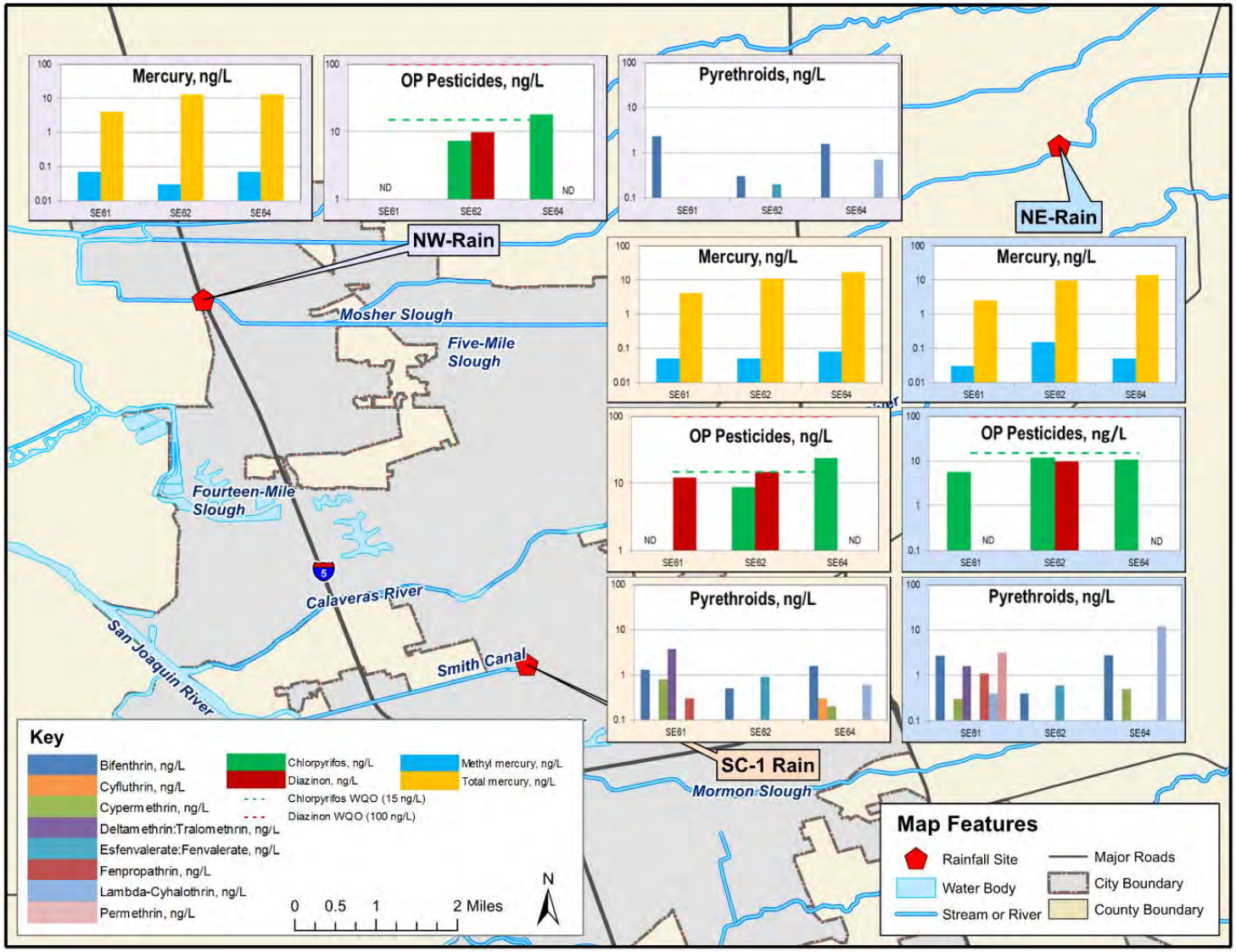

Figure 10. 2016-2017 Rainwater/Atmospheric Deposition Monitoring Results

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4.1.4 Sediment Toxicity and Sediment Chemistry

The monitoring program specifies that sediment toxicity be monitored at receiving water sites on each historic waterbody. Monitoring is performed 2-4 days following one storm event and two dry weather events. Sediment samples are analyzed using the USEPA standardized ten-day sediment toxicity testing method[16] for freshwaters using *Hyalella azteca*, and sediment total organic carbon (TOC) and grain size are reported. If toxicity is determined to be statistically significant and a greater than or equal to 50% increase in *Hyalella azteca* mortality[17] is observed, follow-up testing of sediment chemistry is performed for the parameters specified in **Table 13**.

Table 13. Sediment Chemistry Constituents to be Monitored at the Historic Site (CR-46R)

Pesticides in Sediment[a]	Target Reporting Limit
Organophosphate Pesticides	**µg/kg**
Chlorpyrifos	0.01
Diazinon	0.05
Pyrethroid Pesticides[b]	**ng/g**
Bifenthrin	1
Cyfluthrin-1	3
Cyfluthrin-2	3
Cyfluthrin-3	3
Cyfluthrin-4	3
Cypermethrin-1	3
Cypermethrin-2	3
Cypermethrin-3	3
Cypermethrin-4	3
Deltamethrin	2
Esfenvalerate/Fenvalerate-1	2
Esfenvalerate/Fenvalerate-2	1
Lambda-cyhalothrin-1	1
Lambda-cyhalothrin-2	4
Permethrin-1	4
Permethrin-2	1

Notes:

[a] Follow-up testing of sediment chemistry will be performed if toxicity is determined to be statistically significant and a greater than or equal to 50% increase in *Hyalella azteca* mortality is observed.

[b] Pyrethroid isomers are typically reported as totals instead of the individual isomers except where individual isomers may be obtained.

[16] USEPA 2000. Methods for measuring the toxicity and bioaccumulation of sediment-associated contaminants with freshwater invertebrates. EPA 600/R-99/064. Office of Research and Development. Washington, DC.

[17] City of Stockton and County of San Joaquin. Sediment Toxicity Work Plan. March 27, 2009, revised June 2009.

During 2016-2017, monitoring was completed at CR-46R during three events:

- Three days following SE61, on October 17, 2016
- Two weeks following DW29, on March 14, 2017
- One week following DW30, on June 1, 2017

Sediment toxicity results are summarized in **Table 14** and included in **Appendix D**.

Samples from both storm events showed significant toxicity, and triggered follow up testing of sediment chemistry. Results are summarized below:

- The sample from the second sediment toxicity monitoring event, SE61, showed significant toxicity which can likely be attributed to pesticides (pyrethroids). Survival of *Hyalella azteca (H. azteca)* was 38.8%, a reduction relative to the control of 98.7%. This reduction in survival triggered18 follow-up analysis of pyrethroids in sediment. Sediment chemistry results are shown in **Table 15**. Multiple pyrethroids were detected, with deltamethrin present at the highest concentration. However, pyrethroids were present at lower concentrations in the field duplicate.
- The sample from the third sediment toxicity monitoring event, SE62, also showed significant toxicity which can be attributed to pesticides (pyrethroids). Survival of *Hyalella azteca (H. azteca)* was 48.8%, a reduction relative to the control of 51. 2%. This reduction in survival triggered follow-up analysis of pyrethroids in sediment. Sediment chemistry results are shown in **Table 15**. Multiple pyrethroids were detected, and deltamethrin again was detected at the highest concentration. Deltamethrin was present at a high concentration of 110 ng/g (two orders of magnitude higher than any other of the detected pyrethroids).

  Deltamethrin is in a variety of products used to kill a wide range of insects, and is used outdoors on lawns, ornamental gardens, golf courses, and indoors as a spot or crack and crevice treatment for insects.[19] Deltamethrin was detected in the receiving water sample at CR-46R during DW30, but was not detected at the associated discharge location (CR-46), nor in the upstream receiving water location. During the rain event one month prior (SE64), deltamethrin was detected in both the discharge and receiving water samples at the historic locations (CR-46 and CR-46R), but was not detected in the upstream receiving water location (**Figure 5**).

[18] Follow up testing of sediment chemistry is performed when toxicity is determined to be statistically significant, and a greater than or equal to 50% increase in *H. azteca* mortality is observed.

[19] National Pesticide Information Center: http://npic.orst.edu/factsheets/DeltaGen.html

Table 14. 2016-2017 Sediment Toxicity Results at Calaveras River

Sample ID	Date	Toxicity Present Relative to Lab Control?		Mean % Survival	Reduction in Survival (%)	Mean Growth (mg)
		H. azteca Survival	H. azteca Growth			
DW29						
Control	-	-	-	97.5	-	0.24
CR-46R[a]	3/14/17	No	Yes	96.3	98.7	0.15
CR-46R[a] LD	3/14/17	Yes	Yes	86.2	88.5	0.18
SE61						
Control	-	-	-	96.3	-	0.23
CR-46R[a]	10/17/16	Yes	Yes	38.8	40.3	0.18
CR-46R[a] FD	10/17/16	Yes	Yes	47.5	49.4	0.13
SE62						
Control	-	-	-	100	-	0.204
CR-46R[a]	6/1/17	Yes	No	48.8	51.2	0.188

Notes:

LD = Lab Duplicate

FD = Field Duplicate

Bold indicates that toxicity observed was statistically significant.

[a] Sediment samples are collected downstream of CR-46R

Table 15. Follow-Up Sediment Chemistry Results for Events SE61 and SE62

Pesticides in Sediment	Result (ng/g)		
	SE61	SE61 FD	SE62
Organophosphate Pesticides			
Chlorpyrifos	ND	ND	0.23 J
Diazinon	NR	NR	ND
Pyrethroid Pesticides			
Allethrin	ND	ND	ND
Bifenthrin	2.7	0.87	1.9
Cyfluthrin	0.59	ND	0.46
Lambda-cyhalothrin	0.58	ND	1.7
Cypermethrin	0.34	ND	0.35
Deltamethrin:Tralomethrin	38	3.2	110
Esfenvalerate:Fenvalerate	ND	ND	0.31 J
Fenpropathrin	ND	ND	0.081 J
Tau-Fluvalinate	ND	ND	ND
Permethrin	4.3	ND	1.1
Tetramethrin	ND	ND	ND

Notes:

J = Concentration is between the MDL and the RL and is therefore an estimated value.

ND = Not Detected

NR = Not Reported

4.1.5 Water Column Toxicity Monitoring

The monitoring program specifies that water column toxicity be monitored during one storm event and one dry weather event when the historic monitoring location (CR-46R) is sampled. Water column toxicity is conducted in accordance with USEPA methods20 using short-term chronic toxicity tests based on two freshwater species: 1) Three-brood (6-8 day) survival and reproduction test with water fleas (the crustacean *Ceriodaphnia dubia*); and 2) Seven-day survival and growth test with larval fathead minnows (*Pimephales promelas*). If 100% mortality of either species is detected in a receiving water sample within 24 hours of test initiation, a dilution series testing is initiated (from 6.25% to 100% receiving water) to determine if toxicity was persistent. If statistically significant toxicity is detected, and a greater than or equal to 50% increase in fathead minnow or *Ceriodaphnia dubia* mortality, or reduction in *Ceriodaphnia dubia* mortality compared to the laboratory control is observed, a Toxicity Identification Evaluation (TIE) is conducted.

During 2016-2017, water column toxicity was monitored at site CR-46R during one storm event and one dry weather event:

- SE61 on October 14, 2016
- DW30 on May 24, 2017

During 2016-2017, no significant reductions in *Ceriodaphnia dubia* survival were observed in any of the water samples. Significant reductions in *Ceriodaphnia dubia* reproduction were observed during both events, but there were no significant reductions in fathead minnow survival or growth in any of the water samples. The water column toxicity results are included in **Appendix E**.

[20] USEPA 2002. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms, 4th Edition. EPA-821-R-02-013. Office of Water. Washington, DC.

4.2 DATA QUALITY EVALUATION

Quality Assurance/Quality Control (QA/QC) refers to the process of reviewing lab and "field" initiated checks on the sampling and analytical process. These checks, which include field blanks, method blanks, field duplicates, lab duplicates and matrix spike/matrix spike duplicates (MS/MSD), and data review are used to confirm that data are of high quality. Lab reports are initially screened by the field monitoring contractor for missing analytical data (both environmental and QA/QC), holding time violations, discrepancies in analytical methods or detection limits, and any apparent out-of-range environmental results. If the analytical work appears to be missing any requested analysis, the lab is asked to complete the missing analysis if possible to do so within the specified holding time. Periodically, data analyses are requested even if samples exceed the hold time. Data qualifiers are appended to the environmental data points where appropriate by applying the data quality objectives provided by the laboratories.

The QA/QC process identifies isolated incidents of out-of-range lab and sampling performance, but more importantly identifies potential long-term trends in lab and sampling performance. An important and ongoing component of the QA/QC program is to report and correct these problems as they arise.

Overall, no significant problems with data quality were identified during 2016-2017. There were isolated instances of constituents detected in field blanks, field duplicates not meeting relative percent difference standards (RPD), and lab QA/QC issues. However, when conducting such a large monitoring and reporting program, it is normal for field, lab, and/or analytical issues to arise for a small number of samples. In general, the data collected and reported are considered of high quality and suitable for data analysis with the qualifications noted in the **Appendix A** data report. The main qualifiers used are summarized in **Table 16** .

Table 16. Definitions of Commonly Used QA/QC Qualifiers and Instances of Application

Qualifier	Definition of Qualifier	Data to Which Qualifier Applies
FB	The concentration of a given constituent was detected in the field blank. The associated environmental sample taken at the same site is considered an estimate.	• A field blank was taken at one site for all constituents during each monitoring event.
FD	The Relative Percent Difference (RPD) between the concentrations of a given constituent in the field duplicate and the associated environmental sample was outside the acceptable limit. This indicates that the duplicability and precision of the results for this constituent may be low.	• A field duplicate was taken at one site for all constituents during each monitoring event.
J	The concentration of a given constituents is between the MDL and the RL and is therefore an estimate. The J qualifier does not indicate poor data quality because all the RLs used meet permit requirements.	• The J-flag qualifier is common in all data in the monitoring program.
ND	A given constituent was not detected and is given as < MDL. The ND qualifier does not indicate poor data quality but rather indicates that a constituent was simply not detected.	• The ND qualifier is common in all data in the monitoring program.

4.3 DELTA REGIONAL MONITORING PROGRAM

The Delta RMP is a stakeholder-directed project formed to develop a regional water quality monitoring program to improve understanding of water quality issues in the Sacramento-San Joaquin Delta. The goal of this effort is to better coordinate and design current and future monitoring activities in and around the Delta to create a cost effective approach for providing critically needed water quality information to better inform policy and regulatory decisions of the Regional Water Board and other Federal, State and local agencies and organizations.[21] The RMP is focusing the initial monitoring efforts on mercury, pesticides, nutrients, and pathogens. The City and County are contributing members of the RMP, which began monitoring in 2015. As the data are collected and results reported, the City and County will reference them within the annual reports and mid-term and end-term reports, as needed.

4.4 TOTAL MAXIMUM DAILY LOADS

The General Permit requires that the City and County continue implementation of the stormwater monitoring program, which includes implementation actions and assessments related to applicable TMDLs. Efforts to fulfill TMDL monitoring requirements (included in Attachment G of the General Permit) are summarized in the following sections.

4.4.1 Sacramento-San Joaquin Delta Diazinon and Chlorpyrifos TMDL (Resolution R5-2006-0061)

The organophosphate (OP) Pesticide TMDL establishes wasteload allocations (WLAs) for the sum of diazinon and chlorpyrifos concentrations relative to their respective WQOs. Attachment G of the General Permit requires that, within one year of the receipt of the notice of applicability (NOA) under the General Permit, the Permittees submit an assessment to determine the diazinon and chlorpyrifos levels and attainment of WLAs in urban discharge and of WQOs in the receiving water. The Permittees performed this assessment during 2016-2017, and submitted the information with the Assessment and Prioritization of Water Quality Constituents in the Stockton Urbanized Area.[22] The assessment indicated that, with the exception of Duck Creek, the targets and allocations for the TMDL are largely being met. In addition, Calaveras River, Mosher Slough, and Smith Canal all meet the 303(d) delisting criteria.

4.4.2 Stockton Urban Water Bodies Pathogen TMDL (Resolution No. R5-2009-0030)

The Pathogen TMDL includes WLAs for fecal coliform and *E. coli*. The Permittees are required to continue their monitoring and implementation activities consistent with the Stockton Urban Waterbodies Pathogen Control Program, and document in Mid-Term and End-Term Reports under the General Permit, the implementation of BMPs to control the discharge of pathogens (indicator bacteria) in their urban discharge, as well as submit effectiveness assessments of

[21] http://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/delta_regional_monitoring/index.shtml

[22] City of Stockton and County of San Joaquin. Assessment and Prioritization of Water Quality Constituents in the Stockton Urbanized Area. Prepared by Larry Walker Associates. May 30, 2017.

implemented BMPs. During 2016-2017, the Permittees monitored for indicator bacteria at the Calaveras River, as described in **Section 4.1.2**.

4.4.3 Delta Methylmercury TMDL (Resolution No. R5-2010-0043)

As a part of Phase I of the Sacramento-San Joaquin Delta Methylmercury TMDL,[23] the City and the County are required to conduct a Methylmercury Control Study (Control Study) and participate in the Mercury Exposure Reduction Program (MERP). Progress for the Control Study and MERP participation are reported in the following sections.

Methylmercury Control Study

The Permittees submitted a Control Study Workplan to the Regional Water Board on April 22, 2013, and received feedback from the technical advisory committee and Regional Water Board staff during August 2013. The Permittees submitted a revised Control Study Workplan in October 2013 to address the comments received. The Control Study focuses on evaluating the mercury and methylmercury removal performance of the Airport Business Center detention basin within the SUA, along with examining the potential for methylmercury production in the basin. The Permittees are implementing the Control Study according to the schedule in **Table 17**.

Table 17. Methylmercury Control Study Schedule

Task	Estimated Completion	Completed
Submit Control Study Work Plan to Regional Water Board	April 19, 2013	✓
Regional Water Board and TAC Work Plan Review	May-July 2013	✓
Finalize Work Plan	October 21, 2013	✓
Initiate Control Study Sampling • First Year Monitoring • Second Year Monitoring • Third Year Monitoring	October 2013 • Oct 2013 – Sep 2014 • Oct 2014 – Sep 2015 • Oct 2015 – Sep 2016	✓
Submit Control Study Progress Report	October 2015	✓
Complete Control Study Sampling	September 2016	✓
Submit Annual Progress Report	October 2016 (submitted as part of Annual Report)	✓
Submit Annual Progress Report	October 2017 (submitted as part of Annual Report)	✓
Submit Control Study Final Report to Regional Water Board	October 2018	

[23] Central Valley Regional Water Quality Control Board. 2012. Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Methylmercury and Total Mercury in the Sacramento-San Joaquin River Delta Estuary. Rancho Cordova, CA. Available online: www.waterboards.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/delta_hg/2011oct20/bpa_20oct2011_final.pdf

The Control Study includes monitoring for mercury and methylmercury using grab samples; along with ancillary constituents (suspended sediment, TSS, TDS, turbidity, phosphorus, sulfate, and iron) using composite samples, and field readings. Samples are collected at the detention basin inlets and outlet. During dry weather events, sediment samples are collected for mercury and methylmercury. Sampling occurs during three wet weather events and one dry weather event for three years.

Monitoring was completed during 2015-2016. The Control Study Progress Report was submitted in October 2015. An annual progress report, per TMDL requirements, was submitted in October 2016. This summary fulfills the requirement for the 2017 annual progress report. One final report will be submitted in October of 2018.

Delta Mercury Exposure Reduction Program Participation

The Delta Mercury Control Program requires the entities identified in the Basin Plan to develop and implement a mercury exposure reduction program. The Delta MERP Participants include those entities and agencies that have formally submitted a letter describing their intent to participate in the collective exposure reduction program. The Permittees submitted their letter during 2013-2014, and are participating in the Delta MERP.

The Delta MERP is designed to increase understanding of contaminants in fish and reduce exposure to mercury among people who eat fish from the Delta. The Delta MERP is producing educational materials based on fish consumption guidelines, and also focusing on presenting a balanced message including health risks associated with exposure to mercury in fish, ways to reduce exposure, the health benefits of eating fish generally, and low-mercury fish species and areas. The Delta MERP is also focusing efforts on training opportunities for entities involved in the Delta MERP including county agencies, Tribal organizations, community-based organizations, and health care providers.

During 2016-2017 the Permittees contributed funding to the MERP and have been actively tracking its progress.

4.4.4 Lower San Joaquin River, Stockton Deep Water Ship Channel Organic Enrichment and Low Dissolved Oxygen TMDL (Resolution No. R5-2005-0005)

The Organic Enrichment and Low Dissolved Oxygen TMDL requires that responsible parties implement BMPs to control and abate the discharge of oxygen-demanding substances. Attachment G of the General Permit requires that the covered Permittees continue implementation of BMPs identified in their SWMP to control oxygen demanding substances in their stormwater discharges. These implementation efforts will be documented in the Mid-Term and End-Term Reports required under the General Permit. During 2016-2017, the Permittees monitored for dissolved oxygen at the Calaveras River using grab samples and continuous data sondes, as described in **Section 4.1.2**.

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5. Programmatic Activities and Data

This section provides a summary of the status of the implementation of the stormwater program, as well as the inspections conducted, number and nature of enforcement actions taken, and public education programs implemented during 2016-2017.

As described in **Section 1** and **Section 6**, the City and County submitted a Work Plan as part of their NOI application package (Appendix A). During 2016-2017, the City and County implemented the activities as outlined in the Work Plan.

In addition, throughout each reporting period, the City and County are tracking the data and information necessary to conduct short-term and long-term program effectiveness assessments, which will be completed as part of the Mid-Term and End-Term Reports, respectively. Although this may change from year to year, a summary of the programmatic data and information that is generally tracked for each stormwater program element is provided in **Table 18**.

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Table 18. Data and Information Tracked Annually for Each Program Element

Data/Information Tracked Annually (by Program Element)	Pollutants of Concern Addressed			
	Dissolved Oxygen	Mercury	Pathogen Indicators	Pesticides
Program Management				
Fiscal Analysis (i.e., current NPDES expenditures, projected expenditures for the next fiscal year)	-	-	-	-
Illicit Discharges (ID)				
Number of water pollution complaints received/verified and source of complaints	✓	✓	✓	✓
Number of water pollution issues observed/verified by field staff	✓	✓	✓	✓
Number of illegal connections reported/verified/eliminated	✓	-	✓	-
Types of materials involved in the verified incidents	✓	✓	✓	✓
Location of illicit discharges (Illicit Discharges Location Map)	✓	✓	✓	✓
Number/types enforcement actions taken for illicit discharges and illegal connections	-	-	-	-
Training sessions held; pre- and post-training survey results	✓	✓	✓	✓
Public Outreach (PO)				
Summary of stream cleanup events, volunteer organizations, and number of volunteers	✓	✓	✓	✓
Amount used oil and household hazardous waste collected	✓	✓	-	✓
Number hotline calls received/verified	✓	✓	✓	✓
Number educational materials distributed	✓	✓	✓	✓
Summary of installation of pet waste bag dispensing stations	-	-	✓	-
Number/types mixed media campaigns conducted	✓	✓	✓	✓
Summary of community-wide events	✓	✓	✓	✓
Summary of events held for school-age children	✓	✓	✓	✓

Data/Information Tracked Annually (by Program Element)	Pollutants of Concern Addressed			
	Dissolved Oxygen	Mercury	Pathogen Indicators	Pesticides
Municipal Operations (MO)				
Summary of sanitary sewer overflows	✓	-	✓	-
Information about municipal Capital Improvement Projects (CIPs)/Priority Project status	✓	✓	-	-
Number acres treated with fertilizers; amount applied	✓	-	-	-
Number acres treated with pesticides	-	-	-	✓
Number acres under IPM program	-	-	-	✓
Total pesticide use (by active ingredient, when available) at parks/golf courses/detention basins	-	-	-	✓
Information regarding catch basin prioritization/inspection/cleaning; overall storm drain system maintenance activities	✓	✓	✓	✓
Information regarding pump station inspection/cleaning; overall pump station maintenance activities	✓	✓	✓	✓
Number of catch basins stenciled	✓	✓	✓	✓
Number events required to obtain special use permits and address trash and debris removal	✓	✓	✓	-
Total street miles swept, amount debris removed, and amount green waste collected	✓	✓	✓	✓
Training sessions held; pre- and post-training survey results	✓	✓	✓	✓
Industrial and Commercial (IC)				
Number industrial facilities	✓	✓	✓	✓
Number commercial facilities (significant sources) by category	✓	✓	✓	✓
Number/results industrial facility inspections conducted	✓	✓	✓	✓
Number/results commercial facility inspections conducted	✓	✓	✓	✓
Number/results follow-up inspections conducted	✓	✓	✓	✓
Mobile business Self-Certifications mailed/received	✓	✓	✓	✓
Number BMP Fact Sheets distributed during inspections	✓	✓	✓	✓

Data/Information Tracked Annually (by Program Element)	Pollutants of Concern Addressed			
	Dissolved Oxygen	Mercury	Pathogen Indicators	Pesticides
Number/types enforcement actions taken during inspections/illicit discharge responses	✓	✓	✓	✓
Number/causes referrals made to Regional Water Board due to illicit discharge violations	✓	✓	✓	✓
Number/types enforcement steps taken related to Self-Certification Forms	✓	✓	✓	✓
Number/types enforcement actions taken against carpet cleaners	✓	✓	✓	✓
Training sessions held; pre- and post-training survey results	✓	✓	✓	✓
Construction (CO)				
Number grading permits issued; number requiring SWPPPs and NOIs	✓	✓	-	-
Number private/public construction sites; number requiring SWPPP; number completed	✓	✓	-	-
Number/type outreach materials distributed during inspections	✓	✓	-	-
Number active construction sites; number regular/follow-up inspections conducted	✓	✓	-	-
Number/types of enforcement actions taken	✓	✓	-	-
Training sessions held; pre- and post-training survey results	✓	✓	-	-
Planning and Land Development (LD)				
Number project plans reviewed for stormwater BMPs	✓	✓	✓	✓
Number Priority Projects, by Category	✓	✓	✓	✓
Total acreage covered by approved Priority Projects	✓	✓	✓	✓
Number/Type approved Control Measures	✓	✓	✓	✓
Information for permanent post-construction stormwater treatment devices (Post-Construction BMP Treatment Devices Database)	✓	✓	✓	✓
Completed priority projects/post-construction BMP maintenance oversight inspection results	✓	✓	✓	✓
Number stormwater treatment device access and maintenance agreements executed	✓	✓	✓	✓
Training sessions held; pre- and post-training survey results	✓	✓	✓	✓

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5.1 OVERVIEW OF INSPECTIONS, ENFORCEMENT ACTIONS, AND PUBLIC EDUCATION PROGRAMS

A summary of the inspections conducted, number and nature of enforcement actions taken, and public education programs implemented during 2016-2017 is provided below.

5.1.1 Inspections

Industrial and Commercial Program Element (IC)

Industrial Facility Inspections

The City is currently reorganizing its efforts regarding industrial and commercial inspections and follow-up enforcement actions to better align its resources with the requirements of the Permit. The reorganization is intended to focus the City's efforts on one geographic grid location at a time, with full coverage of all industrial and commercial facilities within that grid. This approach will allow the City's inspectors to concentrate on geographic grids for inspections and response to violations, with the goals of increasing the number of inspections performed each year, providing better opportunities for outreach to facilities, and achieving full compliance of all facilities with stormwater control requirements.

A summary of the County's industrial facility inspections is provided below:

Number of industrial facilities in current inventory[a]	17
Number of facilities inspected in 2016-2017[b]	5
Number of facilities with SWPPPs on site	5
Number of facilities in compliance with stormwater control requirements	5
Number of facilities requiring follow-up inspections	0
Number of facilities in compliance after follow-up inspections	N/A

[a] One site submitted a Notice of Termination (NOT) in 2016-2017 due to lack of exposure to stormwater and was approved. The site will be removed from the industrial site inventory in 2017-2018.

[b] The County maintains an annual presence in the field by inspecting a percentage of industrial sites annually, with the end result being that all sites are inspected at least twice during a normal permit term.

Commercial Facility Inspections

The City is currently reorganizing its efforts regarding industrial and commercial inspections and follow-up enforcement actions to better align its resources with the requirements of the Permit. The reorganization is intended to focus the City's efforts on one geographic grid location at a time, with full coverage of all industrial and commercial facilities within that grid. This approach will allow the City's inspectors to concentrate on geographic grids for inspections and response to violations, with the goals of increasing the number of inspections performed each year, providing better opportunities for outreach to facilities, and achieving full compliance of all facilities with stormwater control requirements.

A summary of the County's 2016-2017 commercial facility inspections is provided below:

Total number of commercial facilities in current inventory	120
Number of commercial facilities requiring inspection[a]	60
Number of facilities inspected in 2016-2017[b]	5
Number of facilities adequately implementing BMPs	5
Number of facilities in compliance with stormwater control requirements	5
Number of facilities requiring follow-up inspections	0
Number of facilities in compliance after follow-up inspections	N/A

[a] The total number of commercial facilities requiring inspection is estimated at about half of all the inventoried facilities each year, in order to project an annual presence in the field.

[b] The County maintains an annual presence in the field by inspecting a percentage of commercial sites annually, with the end result being that all sites are inspected at least twice during a normal permit term.

Mobile Business Self-Certification Forms

The Permittees mailed 95 initial Self-Certification requests on January 29, 2016 and received 40 responses. As a follow-up, the Permittees mailed 55 Self-Certification forms to the remaining mobile carpet cleaning businesses on August 5, 2016. These were considered "Second Notifications."

- The Permittees received 10 completed Self-Certification forms.
- Of the remaining 45 businesses, two were no longer in operation.
- Four pieces of mail were returned to the Permittees.

Construction Program Element (CO)

Construction Site Inspections

A summary of the City's construction site inspections for 2016-2017 is provided below:

Number of active construction sites ≥1 acre in size	34
Number of regular inspections conducted at active construction sites	246
Number of follow-up inspections conducted due to violations	11

The County had no active construction sites greater than or equal to one acre in size.

- Because there were no active construction sites, no inspections were necessary.

Planning and Land Development Program Element (LD)

Post-Construction BMP Maintenance Oversight

The City has a total of six completed priority projects with post-construction BMPs.

- A total of six inspections were conducted, and no enforcement actions were issued due to improper maintenance.

The County has a total of four completed priority projects with post-construction BMPs.

- One inspection was conducted, and no enforcement actions were issued due to improper maintenance.

5.1.2 Enforcement Actions

Illicit Discharges Program Element (ID)

The City tracked enforcement actions in the Illicit Discharges Database. A total of 243 enforcement actions were taken by the Stormwater Division and Environmental Control Division in response to 141 reports of illicit discharge. No illegal connections were identified.

The number and types of enforcement actions taken by the City for during the reporting period are summarized below:

Stormwater Division Enforcement Actions	Number of Actions[a]
None – No Action Taken[b]	23
Administrative	
Verbal Warning	96
Cease and Desist Order[c]	1
Violation Warning Notice[c]	22
Notice to Clean[c]	64
Stop Work Order[c]	3
Administrative Citation (Fine)[c]	5
Correction Order[c]	52
Criminal Enforcement[d]	
Misdemeanor	0
Infraction	0
Total	**243**

Notes:

[a] The total number of enforcement actions taken may be greater than the number of verified incidents due to multiple enforcement actions. These enforcement actions may have occurred on the same day for a single incident.

[b] None – No Action Taken: This enforcement action type denotes that no action was taken. The responsible party may have taken corrective measures before agency personnel arrived and/or a responsible party was not identifiable.

[c] The "Notice of Violation - Administrative Citation form used by MUD - Stormwater includes the following enforcement options: Cease and Desist Order; Violation Warning Notice; Notice to Clean; Stop Work Order; Fine; and Correction Order.

[d] Criminal Enforcement: This category presumes that an action turned over to the District Attorney resulted in a criminal prosecution within the year of the incident. However, data for this category can only be updated in subsequent years (i.e., after criminal prosecution has been successful).

Number of repeat offenders[24] identified: 16

Total number of complaints/problems referred to the Regional Board: 0

[24] Repeat offenders were identified by tracking responsible parties for multiple incidents at the same address on different dates.

The County tracked enforcement actions in the Illicit Discharges Database.

- One enforcement action was taken in response to illicit discharges and illegal connections.
- No repeat offenders were identified, and no complaints or problems were referred to the Regional Water Board. However, one complaint/problem was referred to the Environmental Health Department.

Industrial and Commercial Program Element (IC)

Industrial and Commercial Facility Enforcement Actions

The City is currently reorganizing its efforts regarding industrial and commercial inspections and follow-up enforcement actions to better align its resources with the requirements of the Permit. The reorganization is intended to focus the City's efforts on one geographic grid location at a time, with full coverage of all industrial and commercial facilities within that grid. This approach will allow the City's inspectors to concentrate on geographic grids for inspections and response to violations, with the goals of increasing the number of inspections performed each year, providing better opportunities for outreach to facilities, and achieving full compliance of all facilities with stormwater control requirements.

The County took no enforcement actions against businesses during industrial or commercial inspections.

- All facilities were in compliance with stormwater control requirements.

Mobile Business Enforcement Actions

The Permittees took enforcement steps against mobile businesses with regard to completion of Self-Certification forms in the form of "Second Notifications." A total of 55 Second Notifications were mailed to mobile businesses, and 10 Self-Certification forms were received. No further enforcement was taken during the reporting period.

The City issued one "Notice to Clean" to a carpet cleaning business. This incident and resulting enforcement action was tracked in the Illicit Discharges Database.

Construction Program Element (CO)

Construction Site Enforcement Actions

The City took a total of 268 enforcement actions against construction sites during 246 regular inspections and 11 follow-up inspections. Seven repeat offenders were identified.

The number and types of enforcement actions taken by the City during construction site inspections are shown below.

Enforcement Action Type	Number[a]
Administrative	
Verbal Warning	105
Written Warning	0
Notice of Violation[b]	7
Cease and Desist Order[b]	0
Violation Warning Notice[b]	14
Notice to Clean[b]	87
Stop Work Order[b]	0
Administrative Citation (Fine)[b]	0
Correction Order[b]	55
Criminal Enforcement	
Misdemeanor	0
Infraction	0
Total	**268**

Notes:

[a] Multiple enforcement actions were sometimes taken for a single discharge.

[b] The Notice of Violation – Administrative Citation form used by the City includes the following enforcement options: Cease and Desist Order; Violation Warning Notice; Notice to Clean; Stop Work Order; Fine; and Correction Order.

The County took no enforcement actions against construction sites, since there were no construction sites greater than or equal to one acre in size during the reporting period.

5.1.3 Public Education Programs

The City and County implemented a number of public education and outreach programs during the 2016-2017 reporting period. A summary of these efforts is provided below.

- **Identify and/or Create, Revise, and Distribute Educational Materials:** The Permittees distributed a total of 3,829 educational materials, including brochures and fact sheets, to the general public.
- **Conduct Mixed Media Campaigns:** The Permittees conducted a total of five mixed media campaigns for the general public. These included store front ads located in the retail space under the Stockton Arena and billboards posted along three major roads. A radio message was also broadcast within the area.
- **Participate in Community-Wide Events:** The Permittees conducted a total of nine community-wide events with an estimated 10,265 total attendees.
- **Reach Out to School Age Children Outside of School:** The Permittees held a total of five events for school-age children, reaching an estimated 657 students. In addition, SAWS held 371 events at Stockton area schools, reaching an estimated 12,130 students.
- **Distribute Educational Material to Selected Businesses:** The Permittees distributed 24 educational materials to high-priority commercial businesses.

6. Proposed Modifications

As a part of the annual reporting process, the City and County have qualitatively evaluated the effectiveness of the stormwater program during the Permit term, as well as the experience that staff has had in implementing the program, to identify potential modifications.

At this time, no program modifications have been identified.

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Appendix A
Work Plan as submitted November 1, 2016

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City of Stockton and County of San Joaquin SWMP Annual Work Plan

ID	Task Name	Q3	Q4	Q1	Q2
1	**Section 1 - Program Management**				
2	**Program Coordination**				
3	Review/revise SWMP as needed				
4	Co-permittees meet quarterly				
5	Participate in internal quarterly Stormwater Program Meetings				
6	Participate in statewide stormwater-related meetings, conferences, and stakeholder groups as needed				
7	Review/revise MOUs as necessary				
8	Establish, review, and revise cooperative agreements as needed				
9	**Fiscal Analysis**				
10	Review and revise the Fiscal Analysis reporting format as needed				
11	**Legal Authority**				
12	Review the legal authority as needed				

ID	Task Name	Q3	Q4	Q1	Q2
13	**Section 2 - Illicit Discharges Program Element (ID)**				
14	**ID1 - Detection of Illicit Discharges and Illegal Connections**				
15	Public Reporting				
16	Maintain and advertise Hotline				
17	Coordinate with other agencies and departments				
18	Field Crew Inspections				
19	Continue field observations for IDIC				
20	**ID2 - Illegal Connection Identification and Elimination**				
21	Investigate and eliminate illegal connections				
22	Coordinate with Planning and Land Development program				
23	Coordinate with Construction program				
24	**ID3 - Investigation/Inspection and Follow Up**				
25	Respond to illicit discharges				
26	Maintain contractual services for incident clean-up				
27	Maintain Illicit Discharges Database				
28	**ID4 - Enforcement**				
29	Implement progressive enforcement policy and procedures				
30	Track enforcement actions in Illicit Discharges Database				
31	**ID5 - Training**				
32	Conduct training				

ID	Task Name	Q3	Q4	Q1	Q2
33	**Section 3 - Public Outreach (PO)**				
34	**PO1 - Public Participation**				
35	Implement Storm Drain Marker Program				
36	Organize, support, and/or participate in stream cleanup events				
37	Promote Used Oil and Household Hazardous Waste Programs				
38	Coordinate with Household Hazardous Waste program for pesticide disposal				
39	**PO2 - Hotline**				
40	Maintain 24-hr hotline number				
41	Promote/publicize the 24-hr hotline				
42	**PO3 - Public Outreach Implementation**				
43	Update Website as needed				
44	Implement pet waste outreach program				
45	Track installation of pet waste bag dispensing stations				
46	Participate in community-wide events throughout the year				
47	Conduct mixed media campaigns				
48	Provide community relations				
49	Implement pesticide outreach efforts for staff, residents, retail stores, and PCOs				
50	**PO4 - Public School Education**				
51	Continue to identify opportunities to reach out to school age children				

ID	Task Name	Q3	Q4	Q1	Q2
52	**Section 4 - Municipal Operations (MO)**				
53	**MO1 - Sanitary Sewer Maintenance & Overflow and Spill Response**				
54	Implement the Sanitary Sewer Overflow Emergency Response Plan (SSOERP)				
55	Review the SSOERP and revise as changes occur				
56	**MO2 - Construction Requirements for Municipal Capital Improvement Projects**				
57	Review CIP designs to ensure specifications and notes are included				
58	Require submission of NOI for CIPs greater than or equal to one acre				
59	If a priority project, develop in conformance with the SWQCCP				
60	Improve interdepartamental communication to facilitate accurate recordkeeping and reporting of data				
61	**MO3 - Pollution Prevention at City Facilities**				
62	Assess facilities to determine if they require coverage under the General Industrial Permit				
63	Implement SWPPP/FPPP for Corporation Yard and other facilities as needed				
64	Review CIP projects for compliance with general stormwater requirements, including review for vehicle or equipment wash areas				
65	**MO4 - Landscape and Pest Management**				
66	Implement pesticide and fertilizer application protocol at park sites, landscaped medians, and golf courses				
67	Implement IPM program				
68	Maintain and expand internal inventory on pesticide use and track Parks Division reported pesticide use				
69	Implement Landscaping Standards				
70	**MO5 - Storm Drain System Maintenance**				
71	Implement storm drain system mapping				
72	Review/revise prioritization for catch basin cleaning as needed				
73	Maintain and annually update Catch Basin Database				
74	Implement catch basin maintenance program				
75	Implement pump station maintenance program				
76	Implement detention basin maintenance program				
77	Implement notification procedures for ID/IC and missing catch basin markers or illegible stencils				
78	Require large events and venues to address trash and debris removal, including containerization and street sweeping as appropriate				

ID	Task Name	Q3	Q4	Q1	Q2
79	**MO6 - Street Cleaning and Maintenance**				
80	Implement street sweeping program				
81	Review/revise prioritization of streets for street sweeping program as needed				
82	Implement green waste collection program				
83	Implement Maintenance Staff Guide -- Road Maintenance and Small Construction BMPs				
84	**MO7 - Training**				
85	Conduct training				
86	**Section 5 - Industrial and Commercial Program Element (IC)**				
87	**IC1 - Facility Inventory**				
88	Internal audit of database				
89	Maintain and annually update the inventory and database				
90	Map the industrial and commercial facilities on an annual basis				
91	Implement and track a self-certification program for carpet cleaners				
92	**IC2 - Prioritization and Inspection**				
93	Prioritization				
94	Prioritize facilities as necessary				
95	Inspections				
96	Review/revise industrial inspection checklists as needed				
97	Conduct inspections				
98	Conduct follow-up inspections as needed				
99	**IC3 - BMP Implementation**				
100	Review/revise BMP fact sheets for high priority facilities as needed				
101	Distribute BMP Fact Sheets				
102	Implement outreach efforts to carpet cleaners				
103	**IC4 - Enforcement**				
104	Implement progressive enforcement and referral policy and procedures				
105	Track enforcement actions in the industrial/commercial database				
106	Implement procedures for Regional Water Board based complaints				
107	Review and Revise Industrial General Permit referral policy as needed				
108	**IC5 - Training**				
109	Conduct training				

ID	Task Name	Q3	Q4	Q1	Q2
110	**Section 6 - Construction (CO)**				
111	**CO1 - Municipal Code for Construction Sites**				
112	**CO2 - Plan Review and Approval Process**				
113	Review grading and building permit applications for SWPPP requirements				
	Review erosion control plans				
114	Distribute the Plan & Permit Application Review Procedure handout				
115	**CO3 - Construction Projects Inventory**				
116	Maintain and update the Construction Project Database				
117	**CO4 - Construction Outreach**				
118	Distribute appropriate BMP fact sheets during inspections				
119	**CO5 - Construction Site Inspections & BMP Implementation**				
120	Inspect construction sites >=1 acre monthly				
121	**CO6 - Enforcement**				
122	Implement progressive enforcement policy				
123	Track enforcement actions using the construction database				
124	**CO7 - Training**				
125	Conduct training				

ID	Task Name	Q3	Q4	Q1	Q2
126	**Section 7 - Planning and Land Development (LD)**				
127	**LD1 - Incorporation of Water Quality Protection Principles into City Procedures and Policies**				
128	Revise General Plan as needed				
129	**LD2 - New Development Standards**				
130	Require priority projects to comply with the revised SWQCCP				
131	**LD3 - Plan Review Sign-off**				
132	Revise Post-Construction Plan Review Database as needed				
133	Use Post-Construction Plan Review Database				
134	Review project plans and grading plans for stormwater BMPs				
135	Track projects with post-construction treatment control BMPs				
136	Conduct inspections of completed priority projects to ensure that all approved control measures have been implemented and are being maintained				
137	**LD4 - Maintenance Agreement and Transfer**				
138	Require Stormwater Treatment Device Access and Maintenance Agreement				
139	Implement Post-Construction BMP Maintenance Oversight Protocols				
140	**LD5 - Training**				
141	Conduct training				
142	**Section 8 - Monitoring and Reporting Program**				
143	**Water Quality Monitoring (waterbody varies annually)**				
144	Water quality parameters as needed				
145	Sediment toxicity and sediment chemistry as needed				
146	Water column toxicity as needed				
147	**Delta Regional Monitoring Program**				
148	**Section 9 - Program Implementation, Evaluation, and Reporting**				
149	**Program Implementation**				
150	Update Work Plan as needed				
151	**Annual Report**				

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Appendix B
2016-2017 Monitoring Results

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City of Stockton and County of San Joaquin
Ambient Monitoring Program 2016-2017 Data

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW29	CR-39R	3/2/17	E. Coli	SM 9223B	=	5.2	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
SE62	CR-46	1/18/17	E. Coli	SM 9223B	=	204.6	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE63	CR-46	2/16/17	E. Coli	SM 9223B	=	6867	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE64	CR-42	4/6/17	E. Coli	SM 9223B	=	980.4	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
DW27	CR-46	8/24/16	E. Coli	SM 9223B	=	2	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-46R	8/24/16	E. Coli	SM 9223B	=	14.8	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-42	8/24/16	E. Coli	SM 9223B	=	387.3	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-41	8/24/16	E. Coli	SM 9223B	=	13.4	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-41R	8/24/16	E. Coli	SM 9223B	=	7.5	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-39	8/24/16	E. Coli	SM 9223B	=	4.1	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-39R	8/24/16	E. Coli	SM 9223B	=	3	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW28	CR-46	12/5/16	E. Coli	SM 9223B	=	13.5	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW28	CR-46R	12/5/16	E. Coli	SM 9223B	<	1	-	1	MPN/100ml	ND	FGL Env.	12/5/16	12/6/16
DW28	CR-42	12/5/16	E. Coli	SM 9223B	=	4.1	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW28	CR-41	12/5/16	E. Coli	SM 9223B	=	1	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW28	CR-41R	12/5/16	E. Coli	SM 9223B	<	1	-	1	MPN/100ml	ND	FGL Env.	12/5/16	12/6/16
DW28	CR-39	12/5/16	E. Coli	SM 9223B	<	1	-	1	MPN/100ml	ND	FGL Env.	12/5/16	12/6/16
DW28	CR-39R	12/5/16	E. Coli	SM 9223B	=	6.3	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW29	CR-1R	3/2/17	E. Coli	SM 9223B	=	2	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-46	3/2/17	E. Coli	SM 9223B	=	45	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-46R	3/2/17	E. Coli	SM 9223B	=	4.1	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-42	3/2/17	E. Coli	SM 9223B	=	4.1	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-41	3/2/17	E. Coli	SM 9223B	=	2	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-41R	3/2/17	E. Coli	SM 9223B	=	6.3	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-39	3/2/17	E. Coli	SM 9223B	<	1	-	1	MPN/100ml	U, ND	FGL Env.	3/2/17	3/3/17
DW30	CR-1R	5/24/17	E. Coli	SM 9223B	=	63	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-46	5/24/17	E. Coli	SM 9223B	=	2046	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-46R	5/24/17	E. Coli	SM 9223B	=	97	-	1	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-42	5/24/17	E. Coli	SM 9223B	=	6867	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-41	5/24/17	E. Coli	SM 9223B	=	241	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-41R	5/24/17	E. Coli	SM 9223B	=	86	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-39	5/24/17	E. Coli	SM 9223B	=	10	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17

City of Stockton and County of San Joaquin
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Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW30	CR-39R	5/24/17	E. Coli	SM 9223B	=	41	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
SE61	CR-39	10/14/16	E. Coli	SM 9223B	=	209.8	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-39R	10/14/16	E. Coli	SM 9223B	=	16	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-41	10/14/16	E. Coli	SM 9223B	=	2419.6	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-41R	10/14/16	E. Coli	SM 9223B	=	80.5	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-42	10/14/16	E. Coli	SM 9223B	=	1203.3	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-46	10/14/16	E. Coli	SM 9223B	=	344.8	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-46R	10/14/16	E. Coli	SM 9223B	=	461.1	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE62	CR-1R	1/18/17	E. Coli	SM 9223B	=	5.2	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-39	1/18/17	E. Coli	SM 9223B	=	39.9	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-39R	1/18/17	E. Coli	SM 9223B	=	17.1	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-41	1/18/17	E. Coli	SM 9223B	=	410.6	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-41R	1/18/17	E. Coli	SM 9223B	=	36.4	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-42	1/18/17	E. Coli	SM 9223B	=	206.4	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-46R	1/18/17	E. Coli	SM 9223B	=	14.8	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE63	CR-1R	2/16/17	E. Coli	SM 9223B	=	52	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-39	2/16/17	E. Coli	SM 9223B	=	31	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-39R	2/16/17	E. Coli	SM 9223B	=	86	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-41	2/16/17	E. Coli	SM 9223B	=	512	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-41R	2/16/17	E. Coli	SM 9223B	=	110	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-42	2/16/17	E. Coli	SM 9223B	=	1782	-	10	MPN/100ml		FGL Env.	1/18/17	2/17/17
SE63	CR-46R	2/16/17	E. Coli	SM 9223B	=	52	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE64	CR-1R	4/6/17	E. Coli	SM 9223B	<	1	-	1	MPN/100ml	ND	FGL Env.	4/7/17	4/7/17
SE64	CR-39	4/6/17	E. Coli	SM 9223B	=	51.2	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-39R	4/6/17	E. Coli	SM 9223B	=	8.6	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-41	4/6/17	E. Coli	SM 9223B	=	162.4	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-41R	4/6/17	E. Coli	SM 9223B	=	11	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-46	4/6/17	E. Coli	SM 9223B	=	142.1	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-46R	4/6/17	E. Coli	SM 9223B	=	193.5	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
DW29	CR-1R	3/2/17	Fecal Coliform	SM 9221B	=	20	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-46	3/2/17	Fecal Coliform	SM 9221B	=	1300	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-39R	3/2/17	Fecal Coliform	SM 9221B	=	78	-	18	MPN/100ml		FGL Env.	3/2/17	3/4/17

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Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-46	1/18/17	Fecal Coliform	SM 9221B	=	2300	-	180	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE63	CR-46	2/16/17	Fecal Coliform	SM 9221B	=	23000	-	1800	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE64	CR-42	4/6/17	Fecal Coliform	SM 9221B	=	11000	-	180	MPN/100ml		FGL Env.	4/7/17	4/9/17
DW27	CR-46	8/24/16	Fecal Coliform	SM 9221B	=	1300	-	18	MPN/100ml		FGL Env.	8/24/16	8/27/16
DW27	CR-46R	8/24/16	Fecal Coliform	SM 9221B	=	220	-	18	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-42	8/24/16	Fecal Coliform	SM 9221B	=	7900	-	180	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-41	8/24/16	Fecal Coliform	SM 9221B	=	330	-	18	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-41R	8/24/16	Fecal Coliform	SM 9221B	=	230	-	18	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-39	8/24/16	Fecal Coliform	SM 9221B	=	700	-	18	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-39R	8/24/16	Fecal Coliform	SM 9221B	=	490	-	18	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW28	CR-46	12/5/16	Fecal Coliform	SM 9221B	=	45	-	18	MPN/100ml		FGL Env.	12/5/16	12/8/16
DW28	CR-46R	12/5/16	Fecal Coliform	SM 9221B	=	45	-	18	MPN/100ml		FGL Env.	12/5/16	12/8/16
DW28	CR-42	12/5/16	Fecal Coliform	SM 9221B	=	78	-	18	MPN/100ml		FGL Env.	12/5/16	12/7/16
DW28	CR-41	12/5/16	Fecal Coliform	SM 9221B	=	45	-	18	MPN/100ml		FGL Env.	12/5/16	12/8/16
DW28	CR-41R	12/5/16	Fecal Coliform	SM 9221B	=	20	-	18	MPN/100ml		FGL Env.	12/5/16	12/7/16
DW28	CR-39	12/5/16	Fecal Coliform	SM 9221B	<	18	-	18	MPN/100ml	ND	FGL Env.	12/5/16	12/8/16
DW28	CR-39R	12/5/16	Fecal Coliform	SM 9221B	=	20	-	18	MPN/100ml		FGL Env.	12/5/16	12/9/16
DW29	CR-46R	3/2/17	Fecal Coliform	SM 9221B	=	45	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-42	3/2/17	Fecal Coliform	SM 9221B	=	230	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-41	3/2/17	Fecal Coliform	SM 9221B	=	68	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-41R	3/2/17	Fecal Coliform	SM 9221B	=	20	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-39	3/2/17	Fecal Coliform	SM 9221B	<	18	-	18	MPN/100ml	U, ND	FGL Env.	3/2/17	3/5/17
DW30	CR-1R	5/24/17	Fecal Coliform	SM 9221B	=	45	-	18	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-46	5/24/17	Fecal Coliform	SM 9221B	=	7900	-	180	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-46R	5/24/17	Fecal Coliform	SM 9221B	=	700	-	18	MPN/100ml		FGL Env.	5/24/17	5/28/17
DW30	CR-42	5/24/17	Fecal Coliform	SM 9221B	=	7000	-	180	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-41	5/24/17	Fecal Coliform	SM 9221B	=	310	-	18	MPN/100ml		FGL Env.	5/24/17	5/28/17
DW30	CR-41R	5/24/17	Fecal Coliform	SM 9221B	=	78	-	18	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-39	5/24/17	Fecal Coliform	SM 9221B	<	18	-	18	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-39R	5/24/17	Fecal Coliform	SM 9221B	=	170	-	18	MPN/100ml		FGL Env.	5/24/17	5/27/17
SE61	CR-39	10/14/16	Fecal Coliform	SM 9221B	=	13000	-	180	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE61	CR-39R	10/14/16	Fecal Coliform	SM 9221B	=	700	-	18	MPN/100ml		FGL Env.	10/14/16	10/17/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE61	CR-41	10/14/16	Fecal Coliform	SM 9221B	=	79000	-	1800	MPN/100ml		FGL Env.	10/14/16	10/16/16
SE61	CR-41R	10/14/16	Fecal Coliform	SM 9221B	=	2300	-	180	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE61	CR-42	10/14/16	Fecal Coliform	SM 9221B	=	49000	-	1800	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE61	CR-46	10/14/16	Fecal Coliform	SM 9221B	=	33000	-	1800	MPN/100ml		FGL Env.	10/14/16	10/16/16
SE61	CR-46R	10/14/16	Fecal Coliform	SM 9221B	=	14000	-	180	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE62	CR-1R	1/18/17	Fecal Coliform	SM 9221B	=	78	-	18	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-39	1/18/17	Fecal Coliform	SM 9221B	=	460	-	18	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-39R	1/18/17	Fecal Coliform	SM 9221B	=	330	-	18	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-41	1/18/17	Fecal Coliform	SM 9221B	=	3300	-	180	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-41R	1/18/17	Fecal Coliform	SM 9221B	=	490	-	18	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-42	1/18/17	Fecal Coliform	SM 9221B	=	3300	-	180	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-46R	1/18/17	Fecal Coliform	SM 9221B	=	490	-	18	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE63	CR-1R	2/16/17	Fecal Coliform	SM 9221B	=	220	-	18	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-39	2/16/17	Fecal Coliform	SM 9221B	=	40	-	18	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-39R	2/16/17	Fecal Coliform	SM 9221B	=	210	-	18	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-41	2/16/17	Fecal Coliform	SM 9221B	=	1100	-	18	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-41R	2/16/17	Fecal Coliform	SM 9221B	=	140	-	18	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-42	2/16/17	Fecal Coliform	SM 9221B	=	7900	-	180	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-46R	2/16/17	Fecal Coliform	SM 9221B	=	45	-	18	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE64	CR-1R	4/6/17	Fecal Coliform	SM 9221B	=	78	-	18	MPN/100ml		FGL Env.	4/6/17	4/8/17
SE64	CR-39	4/6/17	Fecal Coliform	SM 9221B	=	1300	-	18	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-39R	4/6/17	Fecal Coliform	SM 9221B	=	93	-	18	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-41	4/6/17	Fecal Coliform	SM 9221B	=	3300	-	180	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-41R	4/6/17	Fecal Coliform	SM 9221B	=	490	-	18	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-46	4/6/17	Fecal Coliform	SM 9221B	=	3300	-	180	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-46R	4/6/17	Fecal Coliform	SM 9221B	=	7000	-	180	MPN/100ml		FGL Env.	4/7/17	4/9/17
DW29	CR-1R	3/2/17	Total Coliform	SM 9221B	=	1700	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-1R	3/2/17	Total Coliform	SM 9223B	=	214.3	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-46	3/2/17	Total Coliform	SM 9221B	=	7900	-	180	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-46	3/2/17	Total Coliform	SM 9223B	=	178.2	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-39R	3/2/17	Total Coliform	SM 9221B	=	4900	-	180	MPN/100ml		FGL Env.	3/2/17	3/4/17
DW29	CR-39R	3/2/17	Total Coliform	SM 9223B	=	275.5	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-46	1/18/17	Total Coliform	SM 9221B	=	79000	-	1800	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-46	1/18/17	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE63	CR-46	2/16/17	Total Coliform	SM 9221B	=	130000	-	1800	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-46	2/16/17	Total Coliform	SM 9223B	>	24196	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE64	CR-42	4/6/17	Total Coliform	SM 9221B	=	230000	-	18000	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-42	4/6/17	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
DW27	CR-46	8/24/16	Total Coliform	SM 9221B	=	12000	-	180	MPN/100ml		FGL Env.	8/24/16	8/27/16
DW27	CR-46	8/24/16	Total Coliform	SM 9223B	=	727	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-46R	8/24/16	Total Coliform	SM 9221B	=	11000	-	180	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-46R	8/24/16	Total Coliform	SM 9223B	=	770.1	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-42	8/24/16	Total Coliform	SM 9221B	=	49000	-	1800	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-42	8/24/16	Total Coliform	SM 9223B	=	2419.6	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-41	8/24/16	Total Coliform	SM 9221B	=	22000	-	180	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-41	8/24/16	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-41R	8/24/16	Total Coliform	SM 9221B	=	7900	-	180	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-41R	8/24/16	Total Coliform	SM 9223B	=	1203.3	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-39	8/24/16	Total Coliform	SM 9221B	=	23000	-	1800	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-39	8/24/16	Total Coliform	SM 9223B	=	1986.3	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW27	CR-39R	8/24/16	Total Coliform	SM 9221B	=	33000	-	1800	MPN/100ml		FGL Env.	8/24/16	8/28/16
DW27	CR-39R	8/24/16	Total Coliform	SM 9223B	=	1413.6	-	1	MPN/100ml		FGL Env.	8/24/16	8/25/16
DW28	CR-46	12/5/16	Total Coliform	SM 9221B	=	4900	-	180	MPN/100ml		FGL Env.	12/5/16	12/8/16
DW28	CR-46	12/5/16	Total Coliform	SM 9223B	=	140.1	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW28	CR-46R	12/5/16	Total Coliform	SM 9221B	=	170	-	18	MPN/100ml		FGL Env.	12/5/16	12/8/16
DW28	CR-46R	12/5/16	Total Coliform	SM 9223B	=	62.2	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW28	CR-42	12/5/16	Total Coliform	SM 9221B	=	230	-	18	MPN/100ml		FGL Env.	12/5/16	12/7/16
DW28	CR-42	12/5/16	Total Coliform	SM 9223B	=	579.4	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW28	CR-41	12/5/16	Total Coliform	SM 9221B	=	1300	-	18	MPN/100ml		FGL Env.	12/5/16	12/8/16
DW28	CR-41	12/5/16	Total Coliform	SM 9223B	=	344.8	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW28	CR-41R	12/5/16	Total Coliform	SM 9221B	=	230	-	18	MPN/100ml		FGL Env.	12/5/16	12/7/16
DW28	CR-41R	12/5/16	Total Coliform	SM 9223B	=	131.4	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW28	CR-39	12/5/16	Total Coliform	SM 9221B	=	1100	-	18	MPN/100ml		FGL Env.	12/5/16	12/8/16
DW28	CR-39	12/5/16	Total Coliform	SM 9223B	=	517.2	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW28	CR-39R	12/5/16	Total Coliform	SM 9221B	=	330	-	18	MPN/100ml		FGL Env.	12/5/16	12/9/16
DW28	CR-39R	12/5/16	Total Coliform	SM 9223B	=	73.3	-	1	MPN/100ml		FGL Env.	12/5/16	12/6/16
DW29	CR-46R	3/2/17	Total Coliform	SM 9221B	=	13000	-	180	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-46R	3/2/17	Total Coliform	SM 9223B	=	248.9	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-42	3/2/17	Total Coliform	SM 9221B	=	7000	-	180	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-42	3/2/17	Total Coliform	SM 9223B	=	1986.3	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-41	3/2/17	Total Coliform	SM 9221B	=	790	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-41	3/2/17	Total Coliform	SM 9223B	=	191.8	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-41R	3/2/17	Total Coliform	SM 9221B	=	1700	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-41R	3/2/17	Total Coliform	SM 9223B	=	488.4	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW29	CR-39	3/2/17	Total Coliform	SM 9221B	=	490	-	18	MPN/100ml		FGL Env.	3/2/17	3/5/17
DW29	CR-39	3/2/17	Total Coliform	SM 9223B	=	235.9	-	1	MPN/100ml		FGL Env.	3/2/17	3/3/17
DW30	CR-1R	5/24/17	Total Coliform	SM 9221B	=	2300	-	180	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-1R	5/24/17	Total Coliform	SM 9223B	=	19863	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-46	5/24/17	Total Coliform	SM 9221B	=	13000	-	180	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-46	5/24/17	Total Coliform	SM 9223B	=	4884	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-46R	5/24/17	Total Coliform	SM 9221B	=	4900	-	180	MPN/100ml		FGL Env.	5/24/17	5/28/17
DW30	CR-46R	5/24/17	Total Coliform	SM 9223B	=	9208	-	1	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-42	5/24/17	Total Coliform	SM 9221B	=	79000	-	1800	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-42	5/24/17	Total Coliform	SM 9223B	>	24196	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-41	5/24/17	Total Coliform	SM 9221B	=	2800	-	18	MPN/100ml		FGL Env.	5/24/17	5/28/17
DW30	CR-41	5/24/17	Total Coliform	SM 9223B	=	24196	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-41R	5/24/17	Total Coliform	SM 9221B	=	7900	-	180	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-41R	5/24/17	Total Coliform	SM 9223B	=	9804	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-39	5/24/17	Total Coliform	SM 9221B	=	3500	-	18	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-39	5/24/17	Total Coliform	SM 9223B	=	5794	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
DW30	CR-39R	5/24/17	Total Coliform	SM 9221B	=	1400	-	18	MPN/100ml		FGL Env.	5/24/17	5/27/17
DW30	CR-39R	5/24/17	Total Coliform	SM 9223B	=	2909	-	10	MPN/100ml		FGL Env.	5/24/17	5/25/17
SE61	CR-39	10/14/16	Total Coliform	SM 9221B	=	33000	-	1800	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE61	CR-39	10/14/16	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-39R	10/14/16	Total Coliform	SM 9221B	=	11000	-	180	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE61	CR-39R	10/14/16	Total Coliform	SM 9223B	=	866.4	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE61	CR-41	10/14/16	Total Coliform	SM 9221B	=	230000	-	18000	MPN/100ml		FGL Env.	10/14/16	10/16/16
SE61	CR-41	10/14/16	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-41R	10/14/16	Total Coliform	SM 9221B	=	7900	-	180	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE61	CR-41R	10/14/16	Total Coliform	SM 9223B	=	461.1	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-42	10/14/16	Total Coliform	SM 9221B	=	490000	-	18000	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE61	CR-42	10/14/16	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-46	10/14/16	Total Coliform	SM 9221B	=	33000	-	1800	MPN/100ml		FGL Env.	10/14/16	10/16/16
SE61	CR-46	10/14/16	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE61	CR-46R	10/14/16	Total Coliform	SM 9221B	=	280000	-	1800	MPN/100ml		FGL Env.	10/14/16	10/17/16
SE61	CR-46R	10/14/16	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	10/14/16	10/15/16
SE62	CR-1R	1/18/17	Total Coliform	SM 9221B	=	3300	-	180	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-1R	1/18/17	Total Coliform	SM 9223B	=	187.2	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-39	1/18/17	Total Coliform	SM 9221B	=	23000	-	1800	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-39	1/18/17	Total Coliform	SM 9223B	=	2419.6	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-39R	1/18/17	Total Coliform	SM 9221B	=	3300	-	180	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-39R	1/18/17	Total Coliform	SM 9223B	=	770.1	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-41	1/18/17	Total Coliform	SM 9221B	=	22000	-	180	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-41	1/18/17	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-41R	1/18/17	Total Coliform	SM 9221B	=	7900	-	180	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-41R	1/18/17	Total Coliform	SM 9223B	=	866.4	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-42	1/18/17	Total Coliform	SM 9221B	=	23000	-	1800	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-42	1/18/17	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE62	CR-46R	1/18/17	Total Coliform	SM 9221B	=	1500	-	18	MPN/100ml		FGL Env.	1/18/17	1/21/17
SE62	CR-46R	1/18/17	Total Coliform	SM 9223B	=	1046.2	-	1	MPN/100ml		FGL Env.	1/18/17	1/19/17
SE63	CR-1R	2/16/17	Total Coliform	SM 9221B	=	1700	-	18	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-1R	2/16/17	Total Coliform	SM 9223B	=	2909	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-39	2/16/17	Total Coliform	SM 9221B	=	23000	-	1800	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-39	2/16/17	Total Coliform	SM 9223B	>	24196	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-39R	2/16/17	Total Coliform	SM 9221B	=	13000	-	180	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-39R	2/16/17	Total Coliform	SM 9223B	=	5794	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-41	2/16/17	Total Coliform	SM 9221B	=	49000	-	1800	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-41	2/16/17	Total Coliform	SM 9223B	>	24196	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE63	CR-41R	2/16/17	Total Coliform	SM 9221B	=	23000	-	18000	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-41R	2/16/17	Total Coliform	SM 9223B	>	24196	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE63	CR-42	2/16/17	Total Coliform	SM 9221B	=	230000	-	18000	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-42	2/16/17	Total Coliform	SM 9223B	>	24196	-	10	MPN/100ml		FGL Env.	1/18/17	2/17/17
SE63	CR-46R	2/16/17	Total Coliform	SM 9221B	=	3300	-	180	MPN/100ml		FGL Env.	2/16/17	2/19/17
SE63	CR-46R	2/16/17	Total Coliform	SM 9223B	=	2382	-	10	MPN/100ml		FGL Env.	2/16/17	2/17/17
SE64	CR-1R	4/6/17	Total Coliform	SM 9221B	=	23000	-	1800	MPN/100ml		FGL Env.	4/6/17	4/8/17
SE64	CR-1R	4/6/17	Total Coliform	SM 9223B	=	770.1	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-39	4/6/17	Total Coliform	SM 9221B	=	230000	-	18000	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-39	4/6/17	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-39R	4/6/17	Total Coliform	SM 9221B	=	23000	-	1800	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-39R	4/6/17	Total Coliform	SM 9223B	=	1046.2	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-41	4/6/17	Total Coliform	SM 9221B	=	230000	-	18000	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-41	4/6/17	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-41R	4/6/17	Total Coliform	SM 9221B	=	49000	-	1800	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-41R	4/6/17	Total Coliform	SM 9223B	=	1046.2	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-46	4/6/17	Total Coliform	SM 9221B	=	330000	-	18000	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-46	4/6/17	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
SE64	CR-46R	4/6/17	Total Coliform	SM 9221B	=	230000	-	18000	MPN/100ml		FGL Env.	4/7/17	4/9/17
SE64	CR-46R	4/6/17	Total Coliform	SM 9223B	>	2419.6	-	1	MPN/100ml		FGL Env.	4/7/17	4/7/17
DW27	CR-46	8/24/16	Mercury	EPA 1631E	=	0.76	0.2	0.5	ng/L		Caltest	8/31/16	9/1/16
DW27	CR-46R	8/24/16	Mercury	EPA 1631E	=	0.59	0.2	0.5	ng/L		Caltest	8/31/16	9/1/16
DW27	CR-42	8/24/16	Mercury	EPA 1631E	=	1.2	0.2	0.5	ng/L		Caltest	8/31/16	9/1/16
DW27	CR-41	8/24/16	Mercury	EPA 1631E	=	0.91	0.2	0.5	ng/L		Caltest	8/31/16	9/1/16
DW27	CR-41R	8/24/16	Mercury	EPA 1631E	=	0.65	0.2	0.5	ng/L		Caltest	8/31/16	9/1/16
DW27	CR-39	8/24/16	Mercury	EPA 1631E	=	1.4	0.2	0.5	ng/L		Caltest	8/31/16	9/1/16
DW27	CR-39R	8/24/16	Mercury	EPA 1631E	=	0.44	0.2	0.5	ng/L	J	Caltest	8/31/16	9/1/16
DW28	CR-46	12/5/16	Mercury	EPA 1631E	=	0.87	0.2	0.5	ng/L		Caltest	12/12/16	12/13/16
DW28	CR-46R	12/5/16	Mercury	EPA 1631E	=	1.4	0.2	0.5	ng/L		Caltest	12/12/16	12/13/16
DW28	CR-42	12/5/16	Mercury	EPA 1631E	=	1.3	0.2	0.5	ng/L		Caltest	12/12/16	12/13/16
DW28	CR-41	12/5/16	Mercury	EPA 1631E	=	1.1	0.2	0.5	ng/L		Caltest	12/12/16	12/13/16
DW28	CR-41R	12/5/16	Mercury	EPA 1631E	=	1	0.2	0.5	ng/L		Caltest	12/12/16	12/13/16
DW28	CR-39	12/5/16	Mercury	EPA 1631E	=	0.89	0.2	0.5	ng/L		Caltest	12/12/16	12/13/16

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DW28	CR-39R	12/5/16	Mercury	EPA 1631E	=	0.69	0.2	0.5	ng/L		Caltest	12/12/16	12/13/16
DW29	CR-1R	3/2/17	Mercury	EPA 1631E	=	6.3	0.2	0.5	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-46	3/2/17	Mercury	EPA 1631E	=	2.1	0.2	0.5	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-46R	3/2/17	Mercury	EPA 1631E	=	6.4	0.2	0.5	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-42	3/2/17	Mercury	EPA 1631E	=	2.7	0.2	0.5	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-41	3/2/17	Mercury	EPA 1631E	=	1.2	0.2	0.5	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-41R	3/2/17	Mercury	EPA 1631E	=	6.6	0.2	0.5	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-39	3/2/17	Mercury	EPA 1631E	=	1.1	0.2	0.5	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-39R	3/2/17	Mercury	EPA 1631E	=	6.5	0.2	0.5	ng/L		Caltest	3/21/17	3/22/17
DW30	CR-1R	5/24/17	Mercury	EPA 1631E	=	1.6	0.2	0.5	ng/L		Caltest	6/1/17	6/2/17
DW30	CR-46	5/24/17	Mercury	EPA 1631E	=	1.2	0.2	0.5	ng/L		Caltest	6/1/17	6/2/17
DW30	CR-46R	5/24/17	Mercury	EPA 1631E	=	2.1	0.2	0.5	ng/L		Caltest	6/1/17	6/2/17
DW30	CR-42	5/24/17	Mercury	EPA 1631E	=	1.8	0.2	0.5	ng/L		Caltest	6/1/17	6/2/17
DW30	CR-41	5/24/17	Mercury	EPA 1631E	=	0.9	0.2	0.5	ng/L		Caltest	6/1/17	6/2/17
DW30	CR-41R	5/24/17	Mercury	EPA 1631E	=	1.7	0.2	0.5	ng/L		Caltest	6/1/17	6/2/17
DW30	CR-39	5/24/17	Mercury	EPA 1631E	=	1.4	0.2	0.5	ng/L		Caltest	6/1/17	6/2/17
DW30	CR-39R	5/24/17	Mercury	EPA 1631E	=	1.9	0.2	0.5	ng/L		Caltest	6/1/17	6/2/17
SE61	CR-39	10/14/16	Mercury	EPA 1631E	=	9	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE61	CR-39R	10/14/16	Mercury	EPA 1631E	=	1.2	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE61	CR-41	10/14/16	Mercury	EPA 1631E	=	95	0.4	1	ng/L		Caltest	10/20/16	10/21/16
SE61	CR-41R	10/14/16	Mercury	EPA 1631E	=	0.88	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE61	CR-42	10/14/16	Mercury	EPA 1631E	=	26	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE61	CR-46	10/14/16	Mercury	EPA 1631E	=	20	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE61	CR-46R	10/14/16	Mercury	EPA 1631E	=	14	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE61	NW-RAIN	10/14/16	Mercury	EPA 1631E	=	4	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE61	NE-RAIN	10/14/16	Mercury	EPA 1631E	=	2.5	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE61	SC-1 RAIN	10/14/16	Mercury	EPA 1631E	=	4.1	0.2	0.5	ng/L		Caltest	10/20/16	10/21/16
SE62	CR-1R	1/18/17	Mercury	EPA 1631E	=	6.6	0.2	0.5	ng/L		Caltest	2/7/17	2/8/17
SE62	CR-39	1/18/17	Mercury	EPA 1631E	=	5.1	0.2	0.5	ng/L		Caltest	2/7/17	2/9/17
SE62	CR-39R	1/18/17	Mercury	EPA 1631E	=	6.4	0.2	0.5	ng/L		Caltest	2/7/17	2/9/17
SE62	CR-41	1/18/17	Mercury	EPA 1631E	=	19	0.2	0.5	ng/L		Caltest	2/7/17	2/8/17
SE62	CR-41R	1/18/17	Mercury	EPA 1631E	=	8.4	0.2	0.5	ng/L		Caltest	2/7/17	2/9/17
SE62	CR-42	1/18/17	Mercury	EPA 1631E	=	12	0.2	0.5	ng/L		Caltest	2/7/17	2/8/17
SE62	CR-46	1/18/17	Mercury	EPA 1631E	=	19	0.2	0.5	ng/L		Caltest	2/7/17	2/8/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-46R	1/18/17	Mercury	EPA 1631E	=	7.1	0.2	0.5	ng/L		Caltest	2/7/17	2/8/17
SE62	NE-RAIN	1/18/17	Mercury	EPA 1631E	=	9.7	0.2	0.5	ng/L		Caltest	2/7/17	2/8/17
SE62	NW-RAIN	1/18/17	Mercury	EPA 1631E	=	13	0.2	0.5	ng/L		Caltest	2/7/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Mercury	EPA 1631E	=	11	0.2	0.5	ng/L		Caltest	2/7/17	2/8/17
SE64	CR-1R	4/6/17	Mercury	EPA 1631E	=	2.2	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
SE64	CR-39	4/6/17	Mercury	EPA 1631E	=	6	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
SE64	CR-39R	4/6/17	Mercury	EPA 1631E	=	2.1	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
SE64	CR-41	4/6/17	Mercury	EPA 1631E	=	18	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
SE64	CR-41R	4/6/17	Mercury	EPA 1631E	=	2.6	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
SE64	CR-42	4/6/17	Mercury	EPA 1631E	=	12	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
SE64	CR-46	4/6/17	Mercury	EPA 1631E	=	15	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
SE64	CR-46R	4/6/17	Mercury	EPA 1631E	=	7.4	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
SE64	NE-RAIN	4/6/17	Mercury	EPA 1631E	=	14	0.2	0.5	ng/L		Caltest	4/20/17	4/21/17
SE64	NW-RAIN	4/6/17	Mercury	EPA 1631E	=	13	0.2	0.5	ng/L		Caltest	4/20/17	4/21/17
SE64	SC-1 RAIN	4/6/17	Mercury	EPA 1631E	=	17	0.2	0.5	ng/L		Caltest	4/18/17	4/19/17
DW27	CR-46	8/24/16	Methyl Mercury	EPA 1630	<	0.02	0.02	0.05	ng/L	ND	Caltest	9/6/16	9/6/16
DW27	CR-46R	8/24/16	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	9/6/16	9/6/16
DW27	CR-42	8/24/16	Methyl Mercury	EPA 1630	=	0.08	0.02	0.05	ng/L		Caltest	9/6/16	9/6/16
DW27	CR-41	8/24/16	Methyl Mercury	EPA 1630	=	0.04	0.02	0.05	ng/L	J	Caltest	9/6/16	9/6/16
DW27	CR-41R	8/24/16	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	9/6/16	9/6/16
DW27	CR-39	8/24/16	Methyl Mercury	EPA 1630	=	0.39	0.02	0.05	ng/L		Caltest	9/6/16	9/6/16
DW27	CR-39R	8/24/16	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	9/6/16	9/6/16
DW28	CR-46	12/5/16	Methyl Mercury	EPA 1630	=	0.02	0.02	0.05	ng/L	J	Caltest	12/8/16	12/8/16
DW28	CR-46R	12/5/16	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	12/8/16	12/8/16
DW28	CR-42	12/5/16	Methyl Mercury	EPA 1630	=	0.04	0.02	0.05	ng/L	J	Caltest	12/8/16	12/8/16
DW28	CR-41	12/5/16	Methyl Mercury	EPA 1630	<	0.02	0.02	0.05	ng/L	ND	Caltest	12/8/16	12/8/16
DW28	CR-41R	12/5/16	Methyl Mercury	EPA 1630	=	0.03	0.02	0.05	ng/L	J	Caltest	12/8/16	12/8/16
DW28	CR-39	12/5/16	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	12/8/16	12/8/16
DW28	CR-39R	12/5/16	Methyl Mercury	EPA 1630	=	0.02	0.02	0.05	ng/L	J	Caltest	12/8/16	12/8/16
DW29	CR-1R	3/2/17	Methyl Mercury	EPA 1630	=	0.07	0.02	0.05	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-46	3/2/17	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-46R	3/2/17	Methyl Mercury	EPA 1630	=	0.09	0.02	0.05	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-42	3/2/17	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-41	3/2/17	Methyl Mercury	EPA 1630	=	0.02	0.02	0.05	ng/L	J	Caltest	3/21/17	3/22/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW29	CR-41R	3/2/17	Methyl Mercury	EPA 1630	=	0.09	0.02	0.05	ng/L		Caltest	3/21/17	3/22/17
DW29	CR-39	3/2/17	Methyl Mercury	EPA 1630	<	0.02	0.02	0.05	ng/L	ND	Caltest	3/21/17	3/22/17
DW29	CR-39R	3/2/17	Methyl Mercury	EPA 1630	=	0.12	0.02	0.05	ng/L		Caltest	3/21/17	3/22/17
DW30	CR-1R	5/24/17	Methyl Mercury	EPA 1630	=	0.1	0.02	0.05	ng/L		Caltest	5/30/17	5/30/17
DW30	CR-46	5/24/17	Methyl Mercury	EPA 1630	=	0.02	0.02	0.05	ng/L	J	Caltest	5/30/17	5/30/17
DW30	CR-46R	5/24/17	Methyl Mercury	EPA 1630	=	0.16	0.02	0.05	ng/L		Caltest	5/30/17	5/30/17
DW30	CR-42	5/24/17	Methyl Mercury	EPA 1630	=	0.1	0.02	0.05	ng/L		Caltest	5/30/17	5/30/17
DW30	CR-41	5/24/17	Methyl Mercury	EPA 1630	<	0.02	0.02	0.05	ng/L	ND	Caltest	5/30/17	5/30/17
DW30	CR-41R	5/24/17	Methyl Mercury	EPA 1630	=	0.17	0.02	0.05	ng/L		Caltest	5/30/17	5/30/17
DW30	CR-39	5/24/17	Methyl Mercury	EPA 1630	=	0.07	0.02	0.05	ng/L		Caltest	5/30/17	5/30/17
DW30	CR-39R	5/24/17	Methyl Mercury	EPA 1630	=	0.13	0.02	0.05	ng/L		Caltest	5/30/17	5/30/17
SE61	CR-39	10/14/16	Methyl Mercury	EPA 1630	=	0.24	0.02	0.05	ng/L		Caltest	11/14/16	11/15/16
SE61	CR-39R	10/14/16	Methyl Mercury	EPA 1630	=	0.03	0.02	0.05	ng/L	J	Caltest	11/14/16	11/15/16
SE61	CR-41	10/14/16	Methyl Mercury	EPA 1630	=	0.98	0.02	0.05	ng/L		Caltest	11/14/16	11/15/16
SE61	CR-41R	10/14/16	Methyl Mercury	EPA 1630	=	0.04	0.02	0.05	ng/L	J	Caltest	11/14/16	11/15/16
SE61	CR-42	10/14/16	Methyl Mercury	EPA 1630	=	0.13	0.02	0.05	ng/L		Caltest	11/14/16	11/15/16
SE61	CR-46	10/14/16	Methyl Mercury	EPA 1630	=	0.15	0.02	0.05	ng/L		Caltest	11/14/16	11/15/16
SE61	CR-46R	10/14/16	Methyl Mercury	EPA 1630	=	0.26	0.02	0.05	ng/L		Caltest	11/14/16	11/15/16
SE61	NW-RAIN	10/14/16	Methyl Mercury	EPA 1630	=	0.07	0.02	0.05	ng/L		Caltest	11/16/16	11/16/16
SE61	NE-RAIN	10/14/16	Methyl Mercury	EPA 1630	=	0.03	0.02	0.05	ng/L	J	Caltest	11/16/16	11/16/16
SE61	SC-1 RAIN	10/14/16	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	11/16/16	11/16/16
SE62	CR-1R	1/18/17	Methyl Mercury	EPA 1630	=	0.06	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	CR-39	1/18/17	Methyl Mercury	EPA 1630	=	0.09	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	CR-39R	1/18/17	Methyl Mercury	EPA 1630	=	0.07	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	CR-41	1/18/17	Methyl Mercury	EPA 1630	=	0.09	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	CR-41R	1/18/17	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	CR-42	1/18/17	Methyl Mercury	EPA 1630	=	0.07	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	CR-46	1/18/17	Methyl Mercury	EPA 1630	=	0.08	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	CR-46R	1/18/17	Methyl Mercury	EPA 1630	=	0.06	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	NE-RAIN	1/18/17	Methyl Mercury	EPA 1630	=	0.15	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE62	NW-RAIN	1/18/17	Methyl Mercury	EPA 1630	=	0.03	0.02	0.05	ng/L	J	Caltest	1/31/17	2/1/17
SE62	SC-1 RAIN	1/18/17	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	1/31/17	2/1/17
SE64	CR-1R	4/6/17	Methyl Mercury	EPA 1630	=	0.12	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	CR-39	4/6/17	Methyl Mercury	EPA 1630	=	0.21	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE64	CR-39R	4/6/17	Methyl Mercury	EPA 1630	=	0.11	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	CR-41	4/6/17	Methyl Mercury	EPA 1630	=	0.17	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	CR-41R	4/6/17	Methyl Mercury	EPA 1630	=	0.13	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	CR-42	4/6/17	Methyl Mercury	EPA 1630	=	0.13	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	CR-46	4/6/17	Methyl Mercury	EPA 1630	=	0.11	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	CR-46R	4/6/17	Methyl Mercury	EPA 1630	=	0.27	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	NE-RAIN	4/6/17	Methyl Mercury	EPA 1630	=	0.05	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	NW-RAIN	4/6/17	Methyl Mercury	EPA 1630	=	0.07	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
SE64	SC-1 RAIN	4/6/17	Methyl Mercury	EPA 1630	=	0.08	0.02	0.05	ng/L		Caltest	4/25/17	4/26/17
DW27	CR-46	8/24/16	Aluminum, Dissolved	EPA 200.8	=	4.25	0.1	10	ug/L	J	FGL Env.	8/29/16	8/29/16
DW27	CR-46R	8/24/16	Aluminum, Dissolved	EPA 200.8	=	5.73	0.1	10	ug/L	J	FGL Env.	8/29/16	8/29/16
DW28	CR-46	12/5/16	Aluminum, Dissolved	EPA 200.8	=	7.99	0.071	10	ug/L	J, h	FGL Env.	12/8/16	12/8/16
DW28	CR-46R	12/5/16	Aluminum, Dissolved	EPA 200.8	=	10.5	0.071	10	ug/L	h	FGL Env.	12/8/16	12/8/16
DW29	CR-46	3/2/17	Aluminum, Dissolved	EPA 200.8	=	57.7	0.1	10	ug/L		FGL Env.	3/4/17	3/4/17
DW29	CR-46R	3/2/17	Aluminum, Dissolved	EPA 200.8	=	4.59	0.1	10	ug/L	J	FGL Env.	3/4/17	3/4/17
DW30	CR-46	5/24/17	Aluminum, Dissolved	EPA 200.8	=	2.7	0.1	10	ug/L	J	FGL Env.	5/26/17	5/26/17
DW30	CR-46R	5/24/17	Aluminum, Dissolved	EPA 200.8	=	10.8	0.1	10	ug/L		FGL Env.	5/26/17	5/26/17
SE61	CR-46	10/14/16	Aluminum, Dissolved	EPA 200.8	=	40.9	0.1	10	ug/L		FGL Env.	10/24/16	10/24/16
SE61	CR-46R	10/14/16	Aluminum, Dissolved	EPA 200.8	=	70.5	0.1	10	ug/L		FGL Env.	10/24/16	10/24/16
SE62	CR-46	1/18/17	Aluminum, Dissolved	EPA 200.8	=	23.6	0.071	10	ug/L	h	FGL Env.	1/25/17	1/25/17
SE62	CR-46R	1/18/17	Aluminum, Dissolved	EPA 200.8	=	17.1	0.071	10	ug/L	h	FGL Env.	1/25/17	1/25/17
SE64	CR-46	4/6/17	Aluminum, Dissolved	EPA 200.8	=	27.5	0.1	10	ug/L		FGL Env.	4/11/17	4/11/17
SE64	CR-46R	4/6/17	Aluminum, Dissolved	EPA 200.8	=	4.55	0.1	10	ug/L	J	FGL Env.	4/11/17	4/11/17
DW27	CR-46	8/24/16	Aluminum, Total	EPA 200.8	=	91.3	0.05	10	ug/L	P	FGL Env.	9/1/16	9/6/16
DW27	CR-46R	8/24/16	Aluminum, Total	EPA 200.8	=	224	0.05	10	ug/L	P	FGL Env.	9/1/16	9/6/16
DW28	CR-46	12/5/16	Aluminum, Total	EPA 200.8	=	35.3	0.05	10	ug/L		FGL Env.	12/7/16	12/9/16
DW28	CR-46R	12/5/16	Aluminum, Total	EPA 200.8	=	280	0.05	10	ug/L		FGL Env.	12/7/16	12/9/16
DW29	CR-46	3/2/17	Aluminum, Total	EPA 200.8	=	1230	0.05	50	ug/L	P	FGL Env.	3/20/17	3/21/17
DW29	CR-46R	3/2/17	Aluminum, Total	EPA 200.8	=	180	0.05	10	ug/L	P	FGL Env.	3/20/17	3/20/17
DW30	CR-46	5/24/17	Aluminum, Total	EPA 200.8	=	28.9	0.05	10	ug/L	P	FGL Env.	6/2/17	6/2/17
DW30	CR-46R	5/24/17	Aluminum, Total	EPA 200.8	=	148	0.05	10	ug/L	P	FGL Env.	6/2/17	6/2/17
SE61	CR-46	10/14/16	Aluminum, Total	EPA 200.8	=	3140	0.05	100	ug/L	P	FGL Env.	10/24/16	10/31/16
SE61	CR-46R	10/14/16	Aluminum, Total	EPA 200.8	=	2750	0.05	100	ug/L	P	FGL Env.	10/24/16	10/31/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-46	1/18/17	Aluminum, Total	EPA 200.8	=	3710	0.2	200	ug/L	P	FGL Env.	1/23/17	1/26/17
SE62	CR-46R	1/18/17	Aluminum, Total	EPA 200.8	=	1840	0.2	100	ug/L	P	FGL Env.	1/23/17	1/26/17
SE64	CR-46	4/6/17	Aluminum, Total	EPA 200.8	=	1230	0.2	100	ug/L	h, P	FGL Env.	4/19/17	5/1/17
SE64	CR-46R	4/6/17	Aluminum, Total	EPA 200.8	=	553	0.2	50	ug/L	P	FGL Env.	4/21/17	5/1/17
DW27	CR-46	8/24/16	Copper, Dissolved	EPA 200.8	=	1.86	0.043	1	ug/L		FGL Env.	8/29/16	8/29/16
DW27	CR-46R	8/24/16	Copper, Dissolved	EPA 200.8	=	2.02	0.043	1	ug/L		FGL Env.	8/29/16	8/29/16
DW28	CR-46	12/5/16	Copper, Dissolved	EPA 200.8	=	2.41	0.038	1	ug/L		FGL Env.	12/8/16	12/8/16
DW28	CR-46R	12/5/16	Copper, Dissolved	EPA 200.8	=	1.49	0.038	1	ug/L		FGL Env.	12/8/16	12/8/16
DW29	CR-46	3/2/17	Copper, Dissolved	EPA 200.8	=	0.954	0.066	1	ug/L	J	FGL Env.	3/4/17	3/4/17
DW29	CR-46R	3/2/17	Copper, Dissolved	EPA 200.8	=	1.26	0.066	1	ug/L		FGL Env.	3/4/17	3/4/17
DW30	CR-46	5/24/17	Copper, Dissolved	EPA 200.8	=	0.668	0.066	1	ug/L	J	FGL Env.	5/26/17	5/26/17
DW30	CR-46R	5/24/17	Copper, Dissolved	EPA 200.8	=	1.84	0.066	1	ug/L		FGL Env.	5/26/17	5/26/17
SE61	CR-46	10/14/16	Copper, Dissolved	EPA 200.8	=	18.4	0.038	1	ug/L		FGL Env.	10/19/16	10/19/16
SE61	CR-46R	10/14/16	Copper, Dissolved	EPA 200.8	=	74.6	0.038	1	ug/L		FGL Env.	10/19/16	10/19/16
SE62	CR-46	1/18/17	Copper, Dissolved	EPA 200.8	=	4.46	0.038	1	ug/L		FGL Env.	1/25/17	1/25/17
SE62	CR-46R	1/18/17	Copper, Dissolved	EPA 200.8	=	6.7	0.038	1	ug/L		FGL Env.	1/25/17	1/25/17
SE64	CR-46	4/6/17	Copper, Dissolved	EPA 200.8	=	4.47	0.066	1	ug/L		FGL Env.	4/11/17	4/11/17
SE64	CR-46R	4/6/17	Copper, Dissolved	EPA 200.8	=	2.58	0.066	1	ug/L		FGL Env.	4/11/17	4/11/17
DW27	CR-46	8/24/16	Copper, Total	EPA 200.8	=	3.69	0.071	1	ug/L		FGL Env.	9/1/16	9/6/16
DW27	CR-46R	8/24/16	Copper, Total	EPA 200.8	=	3.17	0.071	1	ug/L		FGL Env.	9/1/16	9/6/16
DW28	CR-46	12/5/16	Copper, Total	EPA 200.8	=	3.39	0.071	1	ug/L		FGL Env.	12/7/16	12/9/16
DW28	CR-46R	12/5/16	Copper, Total	EPA 200.8	=	2.5	0.071	1	ug/L		FGL Env.	12/7/16	12/9/16
DW29	CR-46	3/2/17	Copper, Total	EPA 200.8	=	2.85	0.071	1	ug/L		FGL Env.	3/20/17	3/20/17
DW29	CR-46R	3/2/17	Copper, Total	EPA 200.8	=	2.27	0.071	1	ug/L		FGL Env.	3/20/17	3/20/17
DW30	CR-46	5/24/17	Copper, Total	EPA 200.8	=	1.71	0.071	1	ug/L		FGL Env.	6/2/17	6/2/17
DW30	CR-46R	5/24/17	Copper, Total	EPA 200.8	=	4.39	0.071	1	ug/L		FGL Env.	6/2/17	6/2/17
SE61	CR-46	10/14/16	Copper, Total	EPA 200.8	=	43.8	0.071	1	ug/L		FGL Env.	10/24/16	10/29/16
SE61	CR-46R	10/14/16	Copper, Total	EPA 200.8	=	39.8	0.071	1	ug/L		FGL Env.	10/24/16	10/29/16
SE62	CR-46	1/18/17	Copper, Total	EPA 200.8	=	13.9	0.012	1	ug/L	h, P	FGL Env.	1/23/17	1/25/17
SE62	CR-46R	1/18/17	Copper, Total	EPA 200.8	=	5.11	0.012	1	ug/L	h, P	FGL Env.	1/24/17	1/24/17
SE64	CR-46	4/6/17	Copper, Total	EPA 200.8	=	13.9	0.071	1	ug/L	h, P	FGL Env.	4/19/17	4/20/17
SE64	CR-46R	4/6/17	Copper, Total	EPA 200.7	=	5.89	0.071	1	ug/L		FGL Env.	4/19/17	4/19/17

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DW27	CR-46	8/24/16	Iron	EPA 200.7	=	203	0.97	50	ug/L		FGL Env.	8/31/16	8/31/16
DW27	CR-46R	8/24/16	Iron	EPA 200.7	=	415	0.97	50	ug/L		FGL Env.	8/31/16	8/31/16
DW28	CR-46	12/5/16	Iron	EPA 200.7	=	92.8	0.97	50	ug/L		FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Iron	EPA 200.7	=	348	0.97	50	ug/L		FGL Env.	12/7/16	12/7/16
DW29	CR-46	3/2/17	Iron	EPA 200.7	=	1420	0.97	50	ug/L		FGL Env.	3/7/17	3/7/17
DW29	CR-46R	3/2/17	Iron	EPA 200.7	=	259	0.97	50	ug/L		FGL Env.	3/7/17	3/7/17
DW30	CR-46	5/24/17	Iron	EPA 200.7	=	110	0.97	50	ug/L		FGL Env.	6/2/17	6/5/17
DW30	CR-46R	5/24/17	Iron	EPA 200.7	=	639	0.97	50	ug/L		FGL Env.	6/5/17	6/5/17
SE61	CR-46	10/14/16	Iron	EPA 200.7	=	4120	0.97	50	ug/L	P	FGL Env.	10/21/16	10/24/16
SE61	CR-46R	10/14/16	Iron	EPA 200.7	=	2970	0.97	50	ug/L	P	FGL Env.	10/21/16	10/24/16
SE62	CR-46	1/18/17	Iron	EPA 200.7	=	2690	0.97	50	ug/L	I	FGL Env.	1/24/17	1/24/17
SE62	CR-46R	1/18/17	Iron	EPA 200.7	=	1150	0.97	50	ug/L	I	FGL Env.	1/24/17	1/24/17
SE64	CR-46	4/6/17	Iron	EPA 200.7	=	1600	0.97	50	ug/L		FGL Env.	4/18/17	4/19/17
SE64	CR-46R	4/6/17	Iron	EPA 200.7	=	803	0.97	50	ug/L		FGL Env.	4/19/17	4/19/17
DW27	CR-46	8/24/16	Lead, Dissolved	EPA 200.8	=	0.121	0.015	0.2	ug/L	J	FGL Env.	8/29/16	8/29/16
DW27	CR-46R	8/24/16	Lead, Dissolved	EPA 200.8	=	0.032	0.015	0.2	ug/L	J	FGL Env.	8/29/16	8/29/16
DW28	CR-46	12/5/16	Lead, Dissolved	EPA 200.8	=	0.121	0.036	0.2	ug/L	J	FGL Env.	12/8/16	12/8/16
DW28	CR-46R	12/5/16	Lead, Dissolved	EPA 200.8	=	0.047	0.036	0.2	ug/L	J	FGL Env.	12/8/16	12/8/16
DW29	CR-46	3/2/17	Lead, Dissolved	EPA 200.8	=	0.035	0.015	0.2	ug/L	J	FGL Env.	3/4/17	3/4/17
DW29	CR-46R	3/2/17	Lead, Dissolved	EPA 200.8	=	0.036	0.015	0.2	ug/L	J	FGL Env.	3/4/17	3/4/17
DW30	CR-46	5/24/17	Lead, Dissolved	EPA 200.8	<	0.015	0.015	0.2	ug/L	U, ND	FGL Env.	5/26/17	5/26/17
DW30	CR-46R	5/24/17	Lead, Dissolved	EPA 200.8	=	0.018	0.015	0.2	ug/L	J	FGL Env.	5/26/17	5/26/17
SE61	CR-46	10/14/16	Lead, Dissolved	EPA 200.8	=	0.852	0.036	0.2	ug/L		FGL Env.	10/19/16	10/19/16
SE61	CR-46R	10/14/16	Lead, Dissolved	EPA 200.8	=	0.93	0.036	0.2	ug/L		FGL Env.	10/19/16	10/19/16
SE62	CR-46	1/18/17	Lead, Dissolved	EPA 200.8	=	0.211	0.036	0.2	ug/L		FGL Env.	1/25/17	1/25/17
SE62	CR-46R	1/18/17	Lead, Dissolved	EPA 200.8	=	0.073	0.036	0.2	ug/L	J	FGL Env.	1/25/17	1/25/17
SE64	CR-46	4/6/17	Lead, Dissolved	EPA 200.8	=	0.085	0.015	0.2	ug/L	J	FGL Env.	4/11/17	4/11/17
SE64	CR-46R	4/6/17	Lead, Dissolved	EPA 200.8	=	0.04	0.015	0.2	ug/L	J	FGL Env.	4/11/17	4/11/17
DW27	CR-46	8/24/16	Lead, Total	EPA 200.8	=	1.19	0.013	0.2	ug/L	I	FGL Env.	9/1/16	9/6/16
DW27	CR-46R	8/24/16	Lead, Total	EPA 200.8	=	3.73	0.013	0.2	ug/L	I	FGL Env.	9/1/16	9/6/16
DW28	CR-46	12/5/16	Lead, Total	EPA 200.7	<	2.7	2.7	10	ug/L	U, ND	FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Lead, Total	EPA 200.7	=	3.89	2.7	10	ug/L	J	FGL Env.	12/7/16	12/7/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW29	CR-46	3/2/17	Lead, Total	EPA 200.8	=	1.4	0.013	0.2	ug/L		FGL Env.	3/20/17	3/20/17
DW29	CR-46R	3/2/17	Lead, Total	EPA 200.8	=	0.465	0.013	0.2	ug/L		FGL Env.	3/20/17	3/20/17
DW30	CR-46	5/24/17	Lead, Total	EPA 200.8	=	0.409	0.013	0.2	ug/L		FGL Env.	6/2/17	6/2/17
DW30	CR-46R	5/24/17	Lead, Total	EPA 200.8	=	0.437	0.013	0.2	ug/L		FGL Env.	6/2/17	6/2/17
SE61	CR-46	10/14/16	Lead, Total	EPA 200.8	=	18.2	0.013	0.2	ug/L		FGL Env.	10/24/16	10/29/16
SE61	CR-46R	10/14/16	Lead, Total	EPA 200.8	=	8.37	0.013	0.2	ug/L		FGL Env.	10/24/16	10/29/16
SE62	CR-46	1/18/17	Lead, Total	EPA 200.8	=	6.6	0.016	0.2	ug/L	h, P	FGL Env.	1/23/17	1/25/17
SE62	CR-46R	1/18/17	Lead, Total	EPA 200.8	=	1.1	0.016	0.2	ug/L	h, P	FGL Env.	1/23/17	1/25/17
SE64	CR-46	4/6/17	Lead, Total	EPA 200.8	=	5.48	0.013	0.2	ug/L	h, P	FGL Env.	4/19/17	4/20/17
SE64	CR-46R	4/6/17	Lead, Total	EPA 200.8	=	1.52	0.013	0.2	ug/L		FGL Env.	4/21/17	4/21/17
DW27	CR-46	8/24/16	Zinc	EPA 200.8	=	33	0.1	10	ug/L	P	FGL Env.	9/1/16	9/6/16
DW27	CR-46R	8/24/16	Zinc	EPA 200.8	=	6.48	0.1	10	ug/L	JP	FGL Env.	9/1/16	9/6/16
DW28	CR-46	12/5/16	Zinc	EPA 200.8	=	61.1	0.11	10	ug/L	I, P	FGL Env.	12/7/16	12/14/16
DW28	CR-46R	12/5/16	Zinc	EPA 200.8	=	11	0.11	10	ug/L	I, P	FGL Env.	12/7/16	12/14/16
DW29	CR-46	3/2/17	Zinc	EPA 200.8	=	16.6	0.1	10	ug/L	I, P	FGL Env.	3/20/17	3/20/17
DW29	CR-46R	3/2/17	Zinc	EPA 200.8	=	97.9	0.1	10	ug/L	I, P	FGL Env.	3/20/17	3/20/17
DW30	CR-46	5/24/17	Zinc	EPA 200.8	=	39.5	0.1	10	ug/L	h	FGL Env.	6/2/17	6/2/17
DW30	CR-46R	5/24/17	Zinc	EPA 200.8	=	16	0.1	10	ug/L	h	FGL Env.	6/2/17	6/2/17
SE61	CR-46	10/14/16	Zinc	EPA 200.8	=	377	0.1	10	ug/L	P	FGL Env.	10/24/16	10/29/16
SE61	CR-46R	10/14/16	Zinc	EPA 200.8	=	209	0.1	10	ug/L	P	FGL Env.	10/24/16	10/29/16
SE62	CR-46	1/18/17	Zinc	EPA 200.8	=	128	0.11	10	ug/L	h, P	FGL Env.	1/23/17	1/25/17
SE62	CR-46R	1/18/17	Zinc	EPA 200.8	=	16.7	0.11	10	ug/L	h, P	FGL Env.	1/23/17	1/25/17
SE64	CR-46	4/6/17	Zinc	EPA 200.8	=	140	0.1	10	ug/L		FGL Env.	4/19/17	4/20/17
SE64	CR-46R	4/6/17	Zinc	EPA 200.8	=	25.9	0.1	10	ug/L	h, P	FGL Env.	4/21/17	4/21/17
DW27	CR-46	8/24/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Chlorpyrifos	EPA 8270M_NCI	=	0.6	0.5	1	ng/L	J	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Chlorpyrifos	EPA 8270M_NCI	<	0.6	0.6	1.1	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	12/8/16	12/31/16

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DW28	CR-42	12/5/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Chlorpyrifos	EPA 8270M_NCI	=	0.6	0.5	1	ng/L	J	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Chlorpyrifos	EPA 8270M_NCI	=	0.6	0.5	1	ng/L	J	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Chlorpyrifos	EPA 8270M_NCI	=	0.6	0.5	1	ng/L	J	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Chlorpyrifos	EPA 8270M_NCI	=	1.1	0.5	1	ng/L		Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Chlorpyrifos	EPA 8270M_NCI	<	0.6	0.6	1.2	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Chlorpyrifos	EPA 8270M_NCI	=	0.6	0.6	1.1	ng/L	J	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Chlorpyrifos	EPA 8270M_NCI	<	2	2	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Chlorpyrifos	EPA 8270M_NCI	<	2	2	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Chlorpyrifos	EPA 8270M_NCI	=	36	10	20	ng/L		Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Chlorpyrifos	EPA 8270M_NCI	<	5	5	10	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Chlorpyrifos	EPA 8270M_NCI	<	2	2	5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Chlorpyrifos	EPA 8270M_NCI	<	2	2	5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Chlorpyrifos	EPA 8270M_NCI	<	2	2	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Chlorpyrifos	EPA 8270M_NCI	=	5.7	0.5	1	ng/L		Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	1.9	0.5	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	1/20/17	2/8/17

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SE62	CR-41	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	4.2	0.5	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	0.7	0.5	1	ng/L	J	Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	6	0.5	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	4.6	0.5	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	0.6	0.5	1	ng/L	J	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	12	0.5	1	ng/L		Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	7.3	0.5	1	ng/L		Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Chlorpyrifos	EPA 8270M_NCI	=	8.7	0.5	1	ng/L		Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	0.5	0.5	1	ng/L	J	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	2.3	0.5	1	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Chlorpyrifos	EPA 8270M_NCI	<	0.5	0.5	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	6.8	1	2	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	0.5	0.5	1	ng/L	J	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	5.9	0.5	1	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	6.5	0.5	1	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	1.3	0.5	1	ng/L		Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	11	0.5	1	ng/L		Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	18	0.5	1	ng/L		Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Chlorpyrifos	EPA 8270M_NCI	=	24	0.5	1	ng/L		Caltest	4/7/17	4/29/17
DW28	CR-46	12/5/16	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
SE61	NW-RAIN	10/14/16	Diazinon	EPA 8270M_NCI	<	0.5	0.5	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Diazinon	EPA 8270M_NCI	=	12	0.1	0.5	ng/L		Caltest	10/17/16	10/29/16
SE62	NE-RAIN	1/18/17	Diazinon	EPA 8270M_NCI	=	9.8	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Diazinon	EPA 8270M_NCI	=	9.8	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Diazinon	EPA 8270M_NCI	=	15	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE64	NE-RAIN	4/6/17	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17

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SE64	SC-1 RAIN	4/6/17	Diazinon	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.6	ng/L	ND, 1	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.6	ng/L	ND, 1	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.6	ng/L	ND, 1	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Allethrin	EPA 8270M_NCI	<	0.5	0.5	2.5	ng/L	ND, 1	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Allethrin	EPA 8270M_NCI	<	0.5	0.5	2.5	ng/L	ND, 1	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Allethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND, 1, 3	Caltest	10/17/16	11/21/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE61	CR-41R	10/14/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Allethrin	EPA 8270M_NCI	<	1	1	5	ng/L	ND, 1, 3	Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Allethrin	EPA 8270M_NCI	<	0.5	0.5	2.5	ng/L	ND, 1	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Allethrin	EPA 8270M_NCI	<	0.5	0.5	2.5	ng/L	ND, 1	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Allethrin	EPA 8270M_NCI	<	0.5	0.5	2.5	ng/L	ND, 1	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND, 1, 2	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Allethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND,1	Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND,1	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND,1,5	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Allethrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND,1, 5	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Bifenthrin	EPA 8270M_NCI	=	2	0.1	0.5	ng/L		Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Bifenthrin	EPA 8270M_NCI	=	1.3	0.1	0.5	ng/L		Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Bifenthrin	EPA 8270M_NCI	=	0.5	0.1	0.5	ng/L		Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	8/31/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW27	CR-39	8/24/16	Bifenthrin	EPA 8270M_NCI	=	0.4	0.1	0.6	ng/L	J	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Bifenthrin	EPA 8270M_NCI	=	0.3	0.1	0.5	ng/L	J	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Bifenthrin	EPA 8270M_NCI	=	0.2	0.1	0.5	ng/L	J	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Bifenthrin	EPA 8270M_NCI	=	0.9	0.1	0.5	ng/L		Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Bifenthrin	EPA 8270M_NCI	=	0.9	0.1	0.5	ng/L		Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Bifenthrin	EPA 8270M_NCI	=	0.3	0.1	0.5	ng/L	J	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Bifenthrin	EPA 8270M_NCI	=	0.6	0.1	0.5	ng/L		Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Bifenthrin	EPA 8270M_NCI	=	0.9	0.1	0.5	ng/L		Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Bifenthrin	EPA 8270M_NCI	=	0.5	0.1	0.5	ng/L		Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Bifenthrin	EPA 8270M_NCI	=	2.4	0.1	0.6	ng/L		Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Bifenthrin	EPA 8270M_NCI	=	1.2	0.1	0.6	ng/L		Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Bifenthrin	EPA 8270M_NCI	=	220	0.5	2.5	ng/L		Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Bifenthrin	EPA 8270M_NCI	=	22	0.5	2.5	ng/L		Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Bifenthrin	EPA 8270M_NCI	=	72	2	10	ng/L		Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Bifenthrin	EPA 8270M_NCI	=	25	1	5	ng/L		Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Bifenthrin	EPA 8270M_NCI	=	6.7	0.5	2.5	ng/L		Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Bifenthrin	EPA 8270M_NCI	=	11	0.5	2.5	ng/L		Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Bifenthrin	EPA 8270M_NCI	=	2.3	0.5	2.5	ng/L	J	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Bifenthrin	EPA 8270M_NCI	=	2.7	0.1	0.5	ng/L		Caltest	10/17/16	10/29/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE61	SC-1 RAIN	10/14/16	Bifenthrin	EPA 8270M_NCI	=	1.3	0.1	0.5	ng/L		Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Bifenthrin	EPA 8270M_NCI	=	0.3	0.1	0.5	ng/L	J	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Bifenthrin	EPA 8270M_NCI	=	15	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Bifenthrin	EPA 8270M_NCI	=	1.1	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Bifenthrin	EPA 8270M_NCI	=	33	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Bifenthrin	EPA 8270M_NCI	=	1.8	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Bifenthrin	EPA 8270M_NCI	=	14	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Bifenthrin	EPA 8270M_NCI	=	20	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Bifenthrin	EPA 8270M_NCI	=	0.7	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Bifenthrin	EPA 8270M_NCI	=	0.4	0.1	0.5	ng/L	J	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Bifenthrin	EPA 8270M_NCI	=	0.3	0.1	0.5	ng/L	J	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Bifenthrin	EPA 8270M_NCI	=	0.5	0.1	0.5	ng/L		Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Bifenthrin	EPA 8270M_NCI	<	0.1	0.1	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Bifenthrin	EPA 8270M_NCI	=	11	0.1	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Bifenthrin	EPA 8270M_NCI	=	0.4	0.1	0.5	ng/L	J	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Bifenthrin	EPA 8270M_NCI	=	6.8	0.2	1	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Bifenthrin	EPA 8270M_NCI	=	0.5	0.1	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Bifenthrin	EPA 8270M_NCI	=	13	0.1	0.5	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Bifenthrin	EPA 8270M_NCI	=	9.5	0.1	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Bifenthrin	EPA 8270M_NCI	=	3.1	0.1	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Bifenthrin	EPA 8270M_NCI	=	2.8	0.1	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Bifenthrin	EPA 8270M_NCI	=	1.6	0.1	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Bifenthrin	EPA 8270M_NCI	=	1.6	0.1	0.5	ng/L		Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Cyfluthrin	EPA 8270M_NCI	=	0.9	0.2	0.5	ng/L		Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW28	CR-41R	12/5/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Cyfluthrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Cyfluthrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Cyfluthrin	EPA 8270M_NCI	<	4	4	10	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Cyfluthrin	EPA 8270M_NCI	=	4.5	2	5	ng/L	J	Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Cyfluthrin	EPA 8270M_NCI	=	1.5	1	2.5	ng/L	J	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Cyfluthrin	EPA 8270M_NCI	=	2.3	1	2.5	ng/L	J	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Cyfluthrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Cyfluthrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Cyfluthrin	EPA 8270M_NCI	=	1.9	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Cyfluthrin	EPA 8270M_NCI	=	0.2	0.2	0.5	ng/L	J	Caltest	1/20/17	2/8/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-42	1/18/17	Cyfluthrin	EPA 8270M_NCI	=	1.7	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Cyfluthrin	EPA 8270M_NCI	=	1.2	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Cyfluthrin	EPA 8270M_NCI	=	0.9	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Cyfluthrin	EPA 8270M_NCI	=	0.6	0.4	1	ng/L	J	Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Cyfluthrin	EPA 8270M_NCI	=	1.5	0.2	0.5	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Cyfluthrin	EPA 8270M_NCI	=	0.9	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Cyfluthrin	EPA 8270M_NCI	=	1300	4	10	ng/L	2	Caltest	4/7/17	5/3/17
SE64	NE-RAIN	4/6/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Cyfluthrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Cyfluthrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Cypermethrin	EPA 8270M_NCI	=	0.4	0.2	0.5	ng/L	J	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Cypermethrin	EPA 8270M_NCI	=	2.2	0.2	0.5	ng/L		Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Cypermethrin	EPA 8270M_NCI	=	13	0.2	0.5	ng/L		Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Cypermethrin	EPA 8270M_NCI	=	0.2	0.2	0.5	ng/L	J	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW29	CR-42	3/2/17	Cypermethrin	EPA 8270M_NCI	=	1.7	0.2	0.5	ng/L		Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Cypermethrin	EPA 8270M_NCI	=	0.8	0.2	0.6	ng/L		Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Cypermethrin	EPA 8270M_NCI	=	3.3	0.2	0.6	ng/L		Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Cypermethrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Cypermethrin	EPA 8270M_NCI	=	19	1	2.5	ng/L		Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Cypermethrin	EPA 8270M_NCI	=	2	1	2.5	ng/L	J	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Cypermethrin	EPA 8270M_NCI	=	9.8	4	10	ng/L	J	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Cypermethrin	EPA 8270M_NCI	=	14	2	5	ng/L		Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Cypermethrin	EPA 8270M_NCI	=	2.7	1	2.5	ng/L		Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Cypermethrin	EPA 8270M_NCI	=	5.6	1	2.5	ng/L		Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Cypermethrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Cypermethrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Cypermethrin	EPA 8270M_NCI	=	0.8	0.2	0.5	ng/L		Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Cypermethrin	EPA 8270M_NCI	=	0.6	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Cypermethrin	EPA 8270M_NCI	=	9.3	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Cypermethrin	EPA 8270M_NCI	=	0.8	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Cypermethrin	EPA 8270M_NCI	=	8.2	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Cypermethrin	EPA 8270M_NCI	=	3.3	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Cypermethrin	EPA 8270M_NCI	=	0.2	0.2	0.5	ng/L	J	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE64	CR-1R	4/6/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Cypermethrin	EPA 8270M_NCI	=	0.6	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Cypermethrin	EPA 8270M_NCI	=	0.2	0.2	0.5	ng/L	J	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Cypermethrin	EPA 8270M_NCI	=	3.1	0.4	1	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Cypermethrin	EPA 8270M_NCI	=	3.1	0.2	0.5	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Cypermethrin	EPA 8270M_NCI	=	1.9	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Cypermethrin	EPA 8270M_NCI	=	0.5	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Cypermethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Cypermethrin	EPA 8270M_NCI	=	0.2	0.2	0.5	ng/L	J	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	0.8	0.2	1	ng/L	J	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1.1	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW30	CR-46	5/24/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1.2	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	3.4	0.2	1	ng/L		Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	0.9	0.2	1.1	ng/L	J	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	0.5	0.2	1	ng/L	J	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	16	4	20	ng/L	J	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	49	2	10	ng/L		Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	19	1	5	ng/L		Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	1.6	0.2	1	ng/L		Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	3.8	0.2	1	ng/L		Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	1.4	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	58	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	2.2	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	4.3	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	6.3	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	1.4	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	2.4	0.2	1	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	2.3	0.4	2	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	3.4	0.2	1	ng/L		Caltest	4/7/17	5/3/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE64	CR-46	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	1.8	0.2	1	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	=	4.7	0.2	1	ng/L		Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Deltamethrin:Tralomethrin	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1.1	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1.2	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1.1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW30	CR-39R	5/24/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	4	4	20	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	1	1	5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	1.8	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	4.5	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	0.5	0.2	1	ng/L	J	Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	3.1	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	4.6	0.2	1	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	0.2	0.2	1	ng/L	J	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	0.6	0.2	1	ng/L	J	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	0.2	0.2	1	ng/L	J	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	0.9	0.2	1	ng/L	J	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.4	0.4	2	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	0.4	0.2	1	ng/L	J	Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	=	0.3	0.2	1	ng/L	J	Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Esfenvalerate:Fenvalerate	EPA 8270M_NCI	<	0.2	0.2	1	ng/L	ND	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW27	CR-46R	8/24/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Fenpropathrin	EPA 8270M_NCI	=	0.4	0.2	0.5	ng/L	J	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Fenpropathrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Fenpropathrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Fenpropathrin	EPA 8270M_NCI	<	4	4	10	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Fenpropathrin	EPA 8270M_NCI	<	2	2	5	ng/L	ND	Caltest	10/17/16	11/21/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE61	CR-46	10/14/16	Fenpropathrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Fenpropathrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Fenpropathrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Fenpropathrin	EPA 8270M_NCI	=	1.1	0.2	0.5	ng/L		Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Fenpropathrin	EPA 8270M_NCI	=	0.3	0.2	0.5	ng/L	J	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.4	0.4	1	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Fenpropathrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Lambda-Cyhalothrin	EPA 8270M_NCI	=	92	0.2	0.5	ng/L		Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	9/1/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW28	CR-46	12/5/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.2	0.2	0.5	ng/L	J	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.5	0.2	0.6	ng/L	J	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.3	0.2	0.6	ng/L	J	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	4	4	10	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	2	2	5	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.4	0.2	0.5	ng/L	J	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-39	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.6	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	1.1	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	1	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	1.2	0.2	0.5	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.7	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.7	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	1.4	0.4	1	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	1	0.2	0.5	ng/L		Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.8	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.4	0.2	0.5	ng/L	J	Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	12	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.7	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Lambda-Cyhalothrin	EPA 8270M_NCI	=	0.6	0.2	0.5	ng/L		Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Permethrin	EPA 8270M_NCI	<	2	2	11	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Permethrin	EPA 8270M_NCI	=	5.5	2	10	ng/L	J	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	12/8/16	12/31/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW28	CR-39R	12/5/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Permethrin	EPA 8270M_NCI	<	10	10	50	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Permethrin	EPA 8270M_NCI	<	10	10	50	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Permethrin	EPA 8270M_NCI	<	40	40	200	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Permethrin	EPA 8270M_NCI	<	20	20	100	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Permethrin	EPA 8270M_NCI	<	10	10	50	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Permethrin	EPA 8270M_NCI	<	10	10	50	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Permethrin	EPA 8270M_NCI	<	10	10	50	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Permethrin	EPA 8270M_NCI	=	3.2	2	10	ng/L	J	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Permethrin	EPA 8270M_NCI	=	5.4	2	10	ng/L	J	Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Permethrin	EPA 8270M_NCI	=	8.6	2	10	ng/L	J	Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Permethrin	EPA 8270M_NCI	=	19	2	10	ng/L		Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Permethrin	EPA 8270M_NCI	=	5.6	2	10	ng/L	J	Caltest	1/20/17	2/8/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-46R	1/18/17	Permethrin	EPA 8270M_NCI	=	2	2	10	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Permethrin	EPA 8270M_NCI	<	4	4	10	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Permethrin	EPA 8270M_NCI	<	2	2	10	ng/L	ND	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW29	CR-41R	3/2/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-42	5/24/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND, 2	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND, 2	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	4	4	10	ng/L	ND, 2	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND, 2	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	2	2	5	ng/L	ND, 2	Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND, 2	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND, 2	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND, 2	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND, 2	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND, 2	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE64	CR-39R	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.4	0.4	1	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NE-RAIN	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Tau-Fluvalinate	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-46R	8/24/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-42	8/24/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41	8/24/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-41R	8/24/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	8/31/16
DW27	CR-39	8/24/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	8/26/16	9/1/16
DW27	CR-39R	8/24/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	8/26/16	9/1/16
DW28	CR-46	12/5/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-46R	12/5/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-42	12/5/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41	12/5/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-41R	12/5/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39	12/5/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW28	CR-39R	12/5/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	12/8/16	12/31/16
DW29	CR-1R	3/2/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46	3/2/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-46R	3/2/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-42	3/2/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41	3/2/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-41R	3/2/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39	3/2/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW29	CR-39R	3/2/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	3/3/17	3/15/17
DW30	CR-1R	5/24/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46	5/24/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-46R	5/24/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW30	CR-42	5/24/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.6	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41	5/24/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-41R	5/24/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39	5/24/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
DW30	CR-39R	5/24/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	5/25/17	6/20/17
SE61	CR-39	10/14/16	Tetramethrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-39R	10/14/16	Tetramethrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	CR-41	10/14/16	Tetramethrin	EPA 8270M_NCI	<	4	4	10	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-41R	10/14/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	CR-42	10/14/16	Tetramethrin	EPA 8270M_NCI	<	2	2	5	ng/L	ND	Caltest	10/17/16	11/21/16
SE61	CR-46	10/14/16	Tetramethrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	CR-46R	10/14/16	Tetramethrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/19/16
SE61	NW-RAIN	10/14/16	Tetramethrin	EPA 8270M_NCI	<	1	1	2.5	ng/L	ND	Caltest	10/17/16	11/20/16
SE61	NE-RAIN	10/14/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE61	SC-1 RAIN	10/14/16	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	10/17/16	10/29/16
SE62	CR-1R	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-39R	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-41R	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-42	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-46	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	CR-46R	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NE-RAIN	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	NW-RAIN	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE62	SC-1 RAIN	1/18/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	1/20/17	2/8/17
SE64	CR-1R	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-39R	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-41	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.4	0.4	1	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-41R	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-42	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	5/3/17
SE64	CR-46	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	CR-46R	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE64	NE-RAIN	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	NW-RAIN	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
SE64	SC-1 RAIN	4/6/17	Tetramethrin	EPA 8270M_NCI	<	0.2	0.2	0.5	ng/L	ND	Caltest	4/7/17	4/29/17
DW27	CR-46	8/24/16	Alkalinity (as CaCO3)	2320B	=	163	1.1	10	mg/L		FGL Env.	8/26/16	8/26/16
DW27	CR-46R	8/24/16	Alkalinity (as CaCO3)	2320B	=	78.4	1.1	10	mg/L		FGL Env.	8/26/16	8/26/16
DW28	CR-46	12/5/16	Alkalinity (as CaCO3)	2320B	=	87.2	1.1	10	mg/L		FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Alkalinity (as CaCO3)	2320B	=	18.8	1.1	10	mg/L		FGL Env.	12/7/16	12/7/16
DW29	CR-46	3/2/17	Alkalinity (as CaCO3)	2320B	=	44.5	1.1	10	mg/L		FGL Env.	3/6/17	3/6/17
DW29	CR-46R	3/2/17	Alkalinity (as CaCO3)	2320B	=	58.4	1.1	10	mg/L		FGL Env.	3/6/17	3/6/17
DW30	CR-46	5/24/17	Alkalinity (as CaCO3)	2320B	=	165	1.1	10	mg/L		FGL Env.	5/26/17	5/26/17
DW30	CR-46R	5/24/17	Alkalinity (as CaCO3)	2320B	=	63.3	1.1	10	mg/L		FGL Env.	5/26/17	5/26/17
SE61	CR-46	10/14/16	Alkalinity (as CaCO3)	2320B	=	10.6	1.1	10	mg/L		FGL Env.	10/19/16	10/19/16
SE61	CR-46R	10/14/16	Alkalinity (as CaCO3)	2320B	=	51.5	1.1	10	mg/L		FGL Env.	10/19/16	10/19/16
SE62	CR-46	1/18/17	Alkalinity (as CaCO3)	2320B	=	8.48	1.1	10	mg/L	J	FGL Env.	1/23/17	1/23/17
SE62	CR-46R	1/18/17	Alkalinity (as CaCO3)	2320B	=	52.8	1.1	10	mg/L		FGL Env.	1/23/17	1/23/17
SE64	CR-46	4/6/17	Alkalinity (as CaCO3)	2320B	=	9.18	1.1	10	mg/L	J	FGL Env.	4/12/17	4/12/17
SE64	CR-46R	4/6/17	Alkalinity (as CaCO3)	2320B	=	52.7	1.1	10	mg/L		FGL Env.	4/12/17	4/12/17
DW27	CR-46	8/24/16	Ammonia Nitrogen	4500NH3G	<	0.072	0.072	0.2	mg/L	Uh	FGL Env.	8/26/16	8/26/16
DW27	CR-46R	8/24/16	Ammonia Nitrogen	4500NH3G	<	0.072	0.072	0.2	mg/L	U	FGL Env.	8/26/16	8/26/16
DW28	CR-46	12/5/16	Ammonia Nitrogen	4500NH3G	<	0.072	0.072	0.2	mg/L	U, ND	FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Ammonia Nitrogen	4500NH3G	<	0.072	0.072	0.2	mg/L	U, ND	FGL Env.	12/7/16	12/7/16
DW29	CR-46	3/2/17	Ammonia Nitrogen	4500NH3G	<	0.072	0.072	0.2	mg/L	U, ND	FGL Env.	3/8/17	3/8/17
DW29	CR-46R	3/2/17	Ammonia Nitrogen	4500NH3G	=	0.186	0.072	0.2	mg/L	J	FGL Env.	3/6/17	3/6/17
DW30	CR-46	5/24/17	Ammonia Nitrogen	4500NH3G	<	0.072	0.072	0.2	mg/L	U, ND	FGL Env.	5/30/17	5/30/17
DW30	CR-46R	5/24/17	Ammonia Nitrogen	4500NH3G	<	0.072	0.072	0.2	mg/L	U, l, ND	FGL Env.	5/31/17	6/1/17
SE61	CR-46	10/14/16	Ammonia Nitrogen	4500NH3G	=	1.23	0.072	0.2	mg/L		FGL Env.	10/19/16	10/19/16
SE61	CR-46R	10/14/16	Ammonia Nitrogen	4500NH3G	=	1.57	0.072	0.2	mg/L		FGL Env.	10/19/16	10/19/16
SE62	CR-46	1/18/17	Ammonia Nitrogen	4500NH3G	=	0.394	0.072	0.2	mg/L		FGL Env.	1/23/17	1/23/17
SE62	CR-46R	1/18/17	Ammonia Nitrogen	4500NH3G	<	0.072	0.072	0.2	mg/L	ND, U	FGL Env.	1/23/17	1/23/17
SE64	CR-46	4/6/17	Ammonia Nitrogen	4500NH3G	=	0.601	0.072	0.2	mg/L		FGL Env.	4/11/17	4/11/17
SE64	CR-46R	4/6/17	Ammonia Nitrogen	4500NH3G	=	0.146	0.072	0.2	mg/L	J	FGL Env.	4/11/17	4/11/17
DW27	CR-46	8/24/16	Bicarbonate	2320B	=	199	1.1	10	mg/L		FGL Env.	8/26/16	8/26/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW27	CR-46R	8/24/16	Bicarbonate	2320B	=	95.6	1.1	10	mg/L		FGL Env.	8/26/16	8/26/16
DW28	CR-46	12/5/16	Bicarbonate	2320B	=	106	1.1	10	mg/L		FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Bicarbonate	2320B	=	22.9	1.1	10	mg/L		FGL Env.	12/7/16	12/7/16
DW29	CR-46	3/2/17	Bicarbonate	2320B	=	54.4	1.1	10	mg/L		FGL Env.	3/6/17	3/6/17
DW29	CR-46R	3/2/17	Bicarbonate	2320B	=	71.2	1.1	10	mg/L		FGL Env.	3/6/17	3/6/17
DW30	CR-46	5/24/17	Bicarbonate	2320B	=	201	1.1	10	mg/L		FGL Env.	5/26/17	5/26/17
DW30	CR-46R	5/24/17	Bicarbonate	2320B	=	77.3	1.1	10	mg/L		FGL Env.	5/26/17	5/26/17
SE61	CR-46	10/14/16	Bicarbonate	2320B	=	12.9	1.1	10	mg/L		FGL Env.	10/19/16	10/19/16
SE61	CR-46R	10/14/16	Bicarbonate	2320B	=	62.7	1.1	10	mg/L		FGL Env.	10/19/16	10/19/16
SE62	CR-46	1/18/17	Bicarbonate	2320B	=	10.2	1.1	10	mg/L		FGL Env.	1/23/17	1/23/17
SE62	CR-46R	1/18/17	Bicarbonate	2320B	=	64.4	1.1	10	mg/L		FGL Env.	1/23/17	1/23/17
SE64	CR-46	4/6/17	Bicarbonate	2320B	=	11.2	1.1	10	mg/L		FGL Env.	4/12/17	4/12/17
SE64	CR-46R	4/6/17	Bicarbonate	2320B	=	64.4	1.1	10	mg/L		FGL Env.	4/12/17	4/12/17
DW27	CR-46	8/24/16	BOD	5210B	=	5.7	0.19	2	mg/L	H	FGL Env.	8/25/16	8/30/16
DW27	CR-46R	8/24/16	BOD	5210B	=	2.2	0.19	2	mg/L	H	FGL Env.	8/25/16	8/30/16
DW28	CR-46	12/5/16	BOD	5210B	=	1.2	0.19	2	mg/L	J, I	FGL Env.	12/5/16	12/10/16
DW28	CR-46R	12/5/16	BOD	5210B	=	1.4	0.19	2	mg/L	J, I	FGL Env.	12/5/16	12/10/16
DW29	CR-46	3/2/17	BOD	5210B	=	0.5	0.19	2	mg/L	J	FGL Env.	3/2/17	3/7/17
DW29	CR-46R	3/2/17	BOD	5210B	=	0.5	0.19	2	mg/L	J	FGL Env.	3/2/17	3/7/17
DW30	CR-46	5/24/17	BOD	5210B	=	1.7	0.19	2	mg/L	J, I	FGL Env.	5/24/17	5/29/17
DW30	CR-46R	5/24/17	BOD	5210B	=	3.1	0.19	2	mg/L	I	FGL Env.	5/24/17	5/29/17
SE61	CR-46	10/14/16	BOD	5210B	=	20.9	0.19	8.7	mg/L	J	FGL Env.	10/15/16	10/20/16
SE61	CR-46R	10/14/16	BOD	5210B	=	66.3	0.19	32	mg/L		FGL Env.	10/15/16	10/20/16
SE62	CR-1R	1/18/17	BOD	5210B	=	1.2	0.19	2	mg/L	J	FGL Env.	1/19/17	1/24/17
SE62	CR-39	1/18/17	BOD	5210B	=	4.6	0.19	2	mg/L		FGL Env.	1/19/17	1/24/17
SE62	CR-39R	1/18/17	BOD	5210B	=	2	0.19	2	mg/L		FGL Env.	1/19/17	1/24/17
SE62	CR-41	1/18/17	BOD	5210B	=	4.7	0.19	2	mg/L		FGL Env.	1/19/17	1/24/17
SE62	CR-41R	1/18/17	BOD	5210B	=	1.1	0.19	2	mg/L	J	FGL Env.	1/19/17	1/24/17
SE62	CR-42	1/18/17	BOD	5210B	=	4.1	0.19	2	mg/L		FGL Env.	1/19/17	1/24/17
SE62	CR-46	1/18/17	BOD	5210B	=	4.3	0.19	2	mg/L		FGL Env.	1/19/17	1/24/17
SE62	CR-46R	1/18/17	BOD	5210B	=	1.5	0.19	2	mg/L	J	FGL Env.	1/19/17	1/24/17
SE63	CR-1R	2/16/17	BOD	5210B	=	0.6	0.19	2	mg/L	J, I	FGL Env.	2/16/17	2/21/17

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE63	CR-39	2/16/17	BOD	5210B	=	3.9	0.19	2	mg/L	I	FGL Env.	2/16/17	2/21/17
SE63	CR-39R	2/16/17	BOD	5210B	=	1.4	0.19	2	mg/L	I	FGL Env.	2/16/17	2/21/17
SE63	CR-41	2/16/17	BOD	5210B	=	5.6	0.19	2	mg/L	I	FGL Env.	2/16/17	2/21/17
SE63	CR-41R	2/16/17	BOD	5210B	=	1.9	0.19	2	mg/L	J, I	FGL Env.	2/16/17	2/21/17
SE63	CR-42	2/16/17	BOD	5210B	=	28.9	0.19	8.7	mg/L	I	FGL Env.	2/16/17	2/21/17
SE63	CR-46	2/16/17	BOD	5210B	=	11	0.19	4.3	mg/L	I	FGL Env.	2/16/17	2/21/17
SE63	CR-46R	2/16/17	BOD	5210B	=	0.8	0.19	2	mg/L	J, I	FGL Env.	2/16/17	2/21/17
SE64	CR-1R	4/6/17	BOD	5210B	=	3	0.19	2	mg/L	I	FGL Env.	4/7/17	4/12/17
SE64	CR-39	4/6/17	BOD	5210B	=	26	0.19	8.7	mg/L	I	FGL Env.	4/7/17	4/12/17
SE64	CR-39R	4/6/17	BOD	5210B	=	1.7	0.19	2	mg/L	JI	FGL Env.	4/7/17	4/12/17
SE64	CR-41	4/6/17	BOD	5210B	=	14.1	0.19	4.3	mg/L	I	FGL Env.	4/7/17	4/12/17
SE64	CR-41R	4/6/17	BOD	5210B	=	4.5	0.19	2	mg/L	I	FGL Env.	4/7/17	4/12/17
SE64	CR-42	4/6/17	BOD	5210B	=	15.8	0.19	4.3	mg/L	I	FGL Env.	4/7/17	4/12/17
SE64	CR-46	4/6/17	BOD	5210B	=	5.8	0.19	2	mg/L	I	FGL Env.	4/7/17	4/12/17
SE64	CR-46R	4/6/17	BOD	5210B	=	12.4	0.19	4.3	mg/L	I	FGL Env.	4/7/17	4/12/17
DW27	CR-46	8/24/16	Carbonate	2320B	<	1.1	1.1	10	mg/L	U	FGL Env.	8/26/16	8/26/16
DW27	CR-46R	8/24/16	Carbonate	2320B	<	1.1	1.1	10	mg/L	U	FGL Env.	8/26/16	8/26/16
DW28	CR-46	12/5/16	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	12/7/16	12/7/16
DW29	CR-46	3/2/17	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	3/6/17	3/6/17
DW29	CR-46R	3/2/17	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	3/6/17	3/6/17
DW30	CR-46	5/24/17	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	5/26/17	5/26/17
DW30	CR-46R	5/24/17	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	5/26/17	5/26/17
SE61	CR-46	10/14/16	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	10/19/16	10/19/16
SE61	CR-46R	10/14/16	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	10/19/16	10/19/16
SE62	CR-46	1/18/17	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	1/23/17	1/23/17
SE62	CR-46R	1/18/17	Carbonate	2320B	<	1.1	1.1	10	mg/L	ND, U	FGL Env.	1/23/17	1/23/17
SE64	CR-46	4/6/17	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	4/12/17	4/12/17
SE64	CR-46R	4/6/17	Carbonate	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	4/12/17	4/12/17
DW27	CR-46	8/24/16	COD	5220D	=	8.89	4.4	20	mg/L	Jb	FGL Env.	9/6/16	9/6/16
DW27	CR-46R	8/24/16	COD	5220D	=	17.7	4.4	20	mg/L	J	FGL Env.	9/12/16	9/12/16
DW28	CR-46	12/5/16	COD	5220D	=	8.89	4.4	20	mg/L	J, b	FGL Env.	12/12/16	12/12/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW28	CR-46R	12/5/16	COD	5220D	=	6.68	4.4	20	mg/L	J, b	FGL Env.	12/12/16	12/12/16
DW29	CR-46	3/2/17	COD	5220D	<	4.4	4.4	20	mg/L	U, ND	FGL Env.	3/13/17	3/13/17
DW29	CR-46R	3/2/17	COD	5220D	<	4.4	4.4	20	mg/L	U, ND	FGL Env.	3/13/17	3/13/17
DW30	CR-46	5/24/17	COD	5220D	<	4.4	4.4	20	mg/L	U,b, h, ND	FGL Env.	6/5/17	6/5/17
DW30	CR-46R	5/24/17	COD	5220D	<	4.4	4.4	20	mg/L	U, b, h, ND	FGL Env.	6/5/17	6/5/17
SE61	CR-46	10/14/16	COD	5220D	=	104	4.4	20	mg/L	b	FGL Env.	10/31/16	10/31/16
SE61	CR-46R	10/14/16	COD	5220D	=	225	4.4	20	mg/L	b	FGL Env.	10/31/16	10/31/16
SE62	CR-46	1/18/17	COD	5220D	=	44.5	4.4	20	mg/L		FGL Env.	2/6/17	2/6/17
SE62	CR-46R	1/18/17	COD	5220D	=	15.2	4.4	20	mg/L	J	FGL Env.	2/6/17	2/6/17
SE64	CR-46	4/6/17	COD	5220D	=	40	4.4	20	mg/L		FGL Env.	4/17/17	4/17/17
SE64	CR-46R	4/6/17	COD	5220D	=	35.5	4.4	20	mg/L		FGL Env.	4/24/17	4/24/17
DW27	CR-46	8/24/16	Dissolved Oxygen	Field	=	4.25	-	0.01	mg/L		Field	-	-
DW27	CR-46R	8/24/16	Dissolved Oxygen	Field	=	6.66	-	0.01	mg/L		Field	-	-
DW27	CR-42	8/24/16	Dissolved Oxygen	Field	=	3.41	-	0.01	mg/L		Field	-	-
DW27	CR-41	8/24/16	Dissolved Oxygen	Field	=	6.96	-	0.01	mg/L		Field	-	-
DW27	CR-41R	8/24/16	Dissolved Oxygen	Field	=	7.6	-	0.01	mg/L		Field	-	-
DW27	CR-39	8/24/16	Dissolved Oxygen	Field	=	5.43	-	0.01	mg/L		Field	-	-
DW27	CR-39R	8/24/16	Dissolved Oxygen	Field	=	8.62	-	0.01	mg/L		Field	-	-
DW28	CR-46	12/5/16	Dissolved Oxygen	Field	=	5.65	-	0.01	mg/L		Field	-	-
DW28	CR-46R	12/5/16	Dissolved Oxygen	Field	=	8.75	-	0.01	mg/L		Field	-	-
DW28	CR-42	12/5/16	Dissolved Oxygen	Field	=	2.71	-	0.01	mg/L		Field	-	-
DW28	CR-41	12/5/16	Dissolved Oxygen	Field	=	6.77	-	0.01	mg/L		Field	-	-
DW28	CR-41R	12/5/16	Dissolved Oxygen	Field	=	9.62	-	0.01	mg/L		Field	-	-
DW28	CR-39	12/5/16	Dissolved Oxygen	Field	=	8.28	-	0.01	mg/L		Field	-	-
DW28	CR-39R	12/5/16	Dissolved Oxygen	Field	=	9.43	-	0.01	mg/L		Field	-	-
DW29	CR-1R	3/2/17	Dissolved Oxygen	Field	=	12.08	-	0.01	mg/L		Field	-	-
DW29	CR-46	3/2/17	Dissolved Oxygen	Field	=	5.63	-	0.01	mg/L		Field	-	-
DW29	CR-46R	3/2/17	Dissolved Oxygen	Field	=	9.44	-	0.01	mg/L		Field	-	-
DW29	CR-42	3/2/17	Dissolved Oxygen	Field	=	5.02	-	0.01	mg/L		Field	-	-
DW29	CR-41	3/2/17	Dissolved Oxygen	Field	=	7.19	-	0.01	mg/L		Field	-	-
DW29	CR-41R	3/2/17	Dissolved Oxygen	Field	=	10.55	-	0.01	mg/L		Field	-	-
DW29	CR-39	3/2/17	Dissolved Oxygen	Field	=	9.01	-	0.01	mg/L		Field	-	-
DW29	CR-39R	3/2/17	Dissolved Oxygen	Field	=	10.45	-	0.01	mg/L		Field	-	-

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW30	CR-1R	5/24/17	Dissolved Oxygen	Field	=	7.9	-	0.01	mg/L		Field	-	-
DW30	CR-46	5/24/17	Dissolved Oxygen	Field	=	5.65	-	0.01	mg/L		Field	-	-
DW30	CR-46R	5/24/17	Dissolved Oxygen	Field	=	6.97	-	0.01	mg/L		Field	-	-
DW30	CR-42	5/24/17	Dissolved Oxygen	Field	=	4.39	-	0.01	mg/L		Field	-	-
DW30	CR-41	5/24/17	Dissolved Oxygen	Field	=	7.74	-	0.01	mg/L		Field	-	-
DW30	CR-41R	5/24/17	Dissolved Oxygen	Field	=	6.78	-	0.01	mg/L		Field	-	-
DW30	CR-39	5/24/17	Dissolved Oxygen	Field	=	4.56	-	0.01	mg/L		Field	-	-
DW30	CR-39R	5/24/17	Dissolved Oxygen	Field	=	7.85	-	0.01	mg/L		Field	-	-
SE61	CR-39	10/14/16	Dissolved Oxygen	Field	=	8.35	-	0.01	mg/L		Field	-	-
SE61	CR-39R	10/14/16	Dissolved Oxygen	Field	=	7.61	-	0.01	mg/L		Field	-	-
SE61	CR-41	10/14/16	Dissolved Oxygen	Field	=	7.11	-	0.01	mg/L		Field	-	-
SE61	CR-41R	10/14/16	Dissolved Oxygen	Field	=	7.39	-	0.01	mg/L		Field	-	-
SE61	CR-42	10/14/16	Dissolved Oxygen	Field	=	7.58	-	0.01	mg/L		Field	-	-
SE61	CR-46	10/14/16	Dissolved Oxygen	Field	=	8.92	-	0.01	mg/L		Field	-	-
SE61	CR-46R	10/14/16	Dissolved Oxygen	Field	=	9.45	-	0.01	mg/L		Field	-	-
SE61	NW-RAIN	10/14/16	Dissolved Oxygen	Field	=	13.42	-	0.01	mg/L		Field	-	-
SE61	NE-RAIN	10/14/16	Dissolved Oxygen	Field	=	8.38	-	0.01	mg/L		Field	-	-
SE61	SC-1 RAIN	10/14/16	Dissolved Oxygen	Field	=	9.63	-	0.01	mg/L		Field	-	-
SE62	CR-1R	1/18/17	Dissolved Oxygen	Field	=	12.82	-	0.01	mg/L		Field	-	-
SE62	CR-39	1/18/17	Dissolved Oxygen	Field	=	10.75	-	0.01	mg/L		Field	-	-
SE62	CR-39R	1/18/17	Dissolved Oxygen	Field	=	10.34	-	0.01	mg/L		Field	-	-
SE62	CR-41	1/18/17	Dissolved Oxygen	Field	=	11.12	-	0.01	mg/L		Field	-	-
SE62	CR-41R	1/18/17	Dissolved Oxygen	Field	=	10.45	-	0.01	mg/L		Field	-	-
SE62	CR-42	1/18/17	Dissolved Oxygen	Field	=	11.34	-	0.01	mg/L		Field	-	-
SE62	CR-46	1/18/17	Dissolved Oxygen	Field	=	10.41	-	0.01	mg/L		Field	-	-
SE62	CR-46R	1/18/17	Dissolved Oxygen	Field	=	10.97	-	0.01	mg/L		Field	-	-
SE62	NE-RAIN	1/18/17	Dissolved Oxygen	Field	=	11.27	-	0.01	mg/L		Field	-	-
SE62	NW-RAIN	1/18/17	Dissolved Oxygen	Field	=	11.73	-	0.01	mg/L		Field	-	-
SE62	SC-1 RAIN	1/18/17	Dissolved Oxygen	Field	=	10.31	-	0.01	mg/L		Field	-	-
SE63	CR-1R	2/16/17	Dissolved Oxygen	Field	=	11.45	-	0.01	mg/L		Field	-	-
SE63	CR-39	2/16/17	Dissolved Oxygen	Field	=	9.02	-	0.01	mg/L		Field	-	-
SE63	CR-39R	2/16/17	Dissolved Oxygen	Field	=	10.75	-	0.01	mg/L		Field	-	-
SE63	CR-41	2/16/17	Dissolved Oxygen	Field	=	7.59	-	0.01	mg/L		Field	-	-
SE63	CR-41R	2/16/17	Dissolved Oxygen	Field	=	10.83	-	0.01	mg/L		Field	-	-

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE63	CR-42	2/16/17	Dissolved Oxygen	Field	=	8.44	-	0.01	mg/L		Field	-	-
SE63	CR-46	2/16/17	Dissolved Oxygen	Field	=	8.57	-	0.01	mg/L		Field	-	-
SE63	CR-46R	2/16/17	Dissolved Oxygen	Field	=	10.04	-	0.01	mg/L		Field	-	-
SE64	CR-1R	4/6/17	Dissolved Oxygen	Field	=	9.01	-	0.01	mg/L		Field	-	-
SE64	CR-39	4/6/17	Dissolved Oxygen	Field	=	7.28	-	0.01	mg/L		Field	-	-
SE64	CR-39R	4/6/17	Dissolved Oxygen	Field	=	9.39	-	0.01	mg/L		Field	-	-
SE64	CR-41	4/6/17	Dissolved Oxygen	Field	=	8.94	-	0.01	mg/L		Field	-	-
SE64	CR-41R	4/6/17	Dissolved Oxygen	Field	=	8.51	-	0.01	mg/L		Field	-	-
SE64	CR-42	4/6/17	Dissolved Oxygen	Field	=	9.86	-	0.01	mg/L		Field	-	-
SE64	CR-46	4/6/17	Dissolved Oxygen	Field	=	9.82	-	0.01	mg/L		Field	-	-
SE64	CR-46R	4/6/17	Dissolved Oxygen	Field	=	9.65	-	0.01	mg/L		Field	-	-
SE64	NE-RAIN	4/6/17	Dissolved Oxygen	Field	=	10.24	-	0.01	mg/L		Field	-	-
SE64	NW-RAIN	4/6/17	Dissolved Oxygen	Field	=	9.61	-	0.01	mg/L		Field	-	-
SE64	SC-1 RAIN	4/6/17	Dissolved Oxygen	Field	=	11.02	-	0.01	mg/L		Field	-	-
DW27	CR-46	8/24/16	EC - Field	Field	=	418	-	1	µmhos/cm		Field	-	-
DW27	CR-46R	8/24/16	EC - Field	Field	=	374	-	1	µmhos/cm		Field	-	-
DW27	CR-42	8/24/16	EC - Field	Field	=	369	-	1	µmhos/cm		Field	-	-
DW27	CR-41	8/24/16	EC - Field	Field	=	604	-	1	µmhos/cm		Field	-	-
DW27	CR-41R	8/24/16	EC - Field	Field	=	638	-	1	µmhos/cm		Field	-	-
DW27	CR-39	8/24/16	EC - Field	Field	=	1094	-	1	µmhos/cm		Field	-	-
DW27	CR-39R	8/24/16	EC - Field	Field	=	531	-	1	µmhos/cm		Field	-	-
DW28	CR-46	12/5/16	EC - Field	Field	=	273	-	1	µmhos/cm		Field	-	-
DW28	CR-46R	12/5/16	EC - Field	Field	=	63	-	1	µmhos/cm		Field	-	-
DW28	CR-42	12/5/16	EC - Field	Field	=	86.6	-	1	µmhos/cm		Field	-	-
DW28	CR-41	12/5/16	EC - Field	Field	=	708	-	1	µmhos/cm		Field	-	-
DW28	CR-41R	12/5/16	EC - Field	Field	=	96	-	1	µmhos/cm		Field	-	-
DW28	CR-39	12/5/16	EC - Field	Field	=	1211	-	1	µmhos/cm		Field	-	-
DW28	CR-39R	12/5/16	EC - Field	Field	=	521	-	1	µmhos/cm		Field	-	-
DW29	CR-1R	3/2/17	EC - Field	Field	=	120	-	1	µmhos/cm		Field	-	-
DW29	CR-46	3/2/17	EC - Field	Field	=	168	-	1	µmhos/cm		Field	-	-
DW29	CR-46R	3/2/17	EC - Field	Field	=	123	-	1	µmhos/cm		Field	-	-
DW29	CR-42	3/2/17	EC - Field	Field	=	531	-	1	µmhos/cm		Field	-	-
DW29	CR-41	3/2/17	EC - Field	Field	=	817	-	1	µmhos/cm		Field	-	-
DW29	CR-41R	3/2/17	EC - Field	Field	=	136	-	1	µmhos/cm		Field	-	-

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DW29	CR-39	3/2/17	EC - Field	Field	=	1371	-	1	µmhos/cm		Field	-	-
DW29	CR-39R	3/2/17	EC - Field	Field	=	184	-	1	µmhos/cm		Field	-	-
DW30	CR-1R	5/24/17	EC - Field	Field	=	151.1	-	1	µmhos/cm		Field	-	-
DW30	CR-46	5/24/17	EC - Field	Field	=	443.8	-	1	µmhos/cm		Field	-	-
DW30	CR-46R	5/24/17	EC - Field	Field	=	166.3	-	1	µmhos/cm		Field	-	-
DW30	CR-42	5/24/17	EC - Field	Field	=	549	-	1	µmhos/cm		Field	-	-
DW30	CR-41	5/24/17	EC - Field	Field	=	654	-	1	µmhos/cm		Field	-	-
DW30	CR-41R	5/24/17	EC - Field	Field	=	199.8	-	1	µmhos/cm		Field	-	-
DW30	CR-39	5/24/17	EC - Field	Field	=	1026	-	1	µmhos/cm		Field	-	-
DW30	CR-39R	5/24/17	EC - Field	Field	=	187.8	-	1	µmhos/cm		Field	-	-
SE61	CR-39	10/14/16	EC - Field		=	580	-	1	µmhos/cm		Field	-	-
SE61	CR-39R	10/14/16	EC - Field		=	755	-	1	µmhos/cm		Field	-	-
SE61	CR-41	10/14/16	EC - Field		=	212	-	1	µmhos/cm		Field	-	-
SE61	CR-41R	10/14/16	EC - Field		=	567	-	1	µmhos/cm		Field	-	-
SE61	CR-42	10/14/16	EC - Field		=	261	-	1	µmhos/cm		Field	-	-
SE61	CR-46	10/14/16	EC - Field		=	64	-	1	µmhos/cm		Field	-	-
SE61	CR-46R	10/14/16	EC - Field		=	216	-	1	µmhos/cm		Field	-	-
SE61	NW-RAIN	10/14/16	EC - Field		=	15	-	1	µmhos/cm		Field	-	-
SE61	NE-RAIN	10/14/16	EC - Field		=	18	-	1	µmhos/cm		Field	-	-
SE61	SC-1 RAIN	10/14/16	EC - Field		=	10	-	1	µmhos/cm		Field	-	-
SE62	CR-1R	1/18/17	EC - Field		=	167	-	1	µmhos/cm		Field	-	-
SE62	CR-39	1/18/17	EC - Field		=	752	-	1	µmhos/cm		Field	-	-
SE62	CR-39R	1/18/17	EC - Field		=	188	-	1	µmhos/cm		Field	-	-
SE62	CR-41	1/18/17	EC - Field		=	47	-	1	µmhos/cm		Field	-	-
SE62	CR-41R	1/18/17	EC - Field		=	134	-	1	µmhos/cm		Field	-	-
SE62	CR-42	1/18/17	EC - Field		=	17	-	1	µmhos/cm		Field	-	-
SE62	CR-46	1/18/17	EC - Field		=	40	-	1	µmhos/cm		Field	-	-
SE62	CR-46R	1/18/17	EC - Field		=	136	-	1	µmhos/cm		Field	-	-
SE62	NE-RAIN	1/18/17	EC - Field		=	11	-	1	µmhos/cm		Field	-	-
SE62	NW-RAIN	1/18/17	EC - Field		=	7	-	1	µmhos/cm		Field	-	-
SE62	SC-1 RAIN	1/18/17	EC - Field		=	6	-	1	µmhos/cm		Field	-	-
SE63	CR-1R	2/16/17	EC - Field		=	134	-	1	µmhos/cm		Field	-	-
SE63	CR-39	2/16/17	EC - Field		=	1114	-	1	µmhos/cm		Field	-	-
SE63	CR-39R	2/16/17	EC - Field		=	150	-	1	µmhos/cm		Field	-	-

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SE63	CR-41	2/16/17	EC - Field		=	536	-	1	µmhos/cm		Field	-	-
SE63	CR-41R	2/16/17	EC - Field		=	137	-	1	µmhos/cm		Field	-	-
SE63	CR-42	2/16/17	EC - Field		=	103	-	1	µmhos/cm		Field	-	-
SE63	CR-46	2/16/17	EC - Field		=	70	-	1	µmhos/cm		Field	-	-
SE63	CR-46R	2/16/17	EC - Field		=	128	-	1	µmhos/cm		Field	-	-
SE64	CR-1R	4/6/17	EC - Field		=	190	-	1	µmhos/cm		Field	-	-
SE64	CR-39	4/6/17	EC - Field		=	553.1	-	1	µmhos/cm		Field	-	-
SE64	CR-39R	4/6/17	EC - Field		=	217.3	-	1	µmhos/cm		Field	-	-
SE64	CR-41	4/6/17	EC - Field		=	104.2	-	1	µmhos/cm		Field	-	-
SE64	CR-41R	4/6/17	EC - Field		=	179.1	-	1	µmhos/cm		Field	-	-
SE64	CR-42	4/6/17	EC - Field		=	31	-	1	µmhos/cm		Field	-	-
SE64	CR-46	4/6/17	EC - Field		=	48	-	1	µmhos/cm		Field	-	-
SE64	CR-46R	4/6/17	EC - Field		=	153	-	1	µmhos/cm		Field	-	-
SE64	NE-RAIN	4/6/17	EC - Field		=	25	-	1	µmhos/cm		Field	-	-
SE64	NW-RAIN	4/6/17	EC - Field		=	11.5	-	1	µmhos/cm		Field	-	-
SE64	SC-1 RAIN	4/6/17	EC - Field		=	13	-	1	µmhos/cm		Field	-	-
DW27	CR-46	8/24/16	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U	FGL Env.	8/26/16	8/26/16
DW27	CR-46R	8/24/16	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U	FGL Env.	8/26/16	8/26/16
DW28	CR-46	12/5/16	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	12/7/16	12/7/16
DW29	CR-46	3/2/17	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	3/6/17	3/6/17
DW29	CR-46R	3/2/17	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	3/6/17	3/6/17
DW30	CR-46	5/24/17	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	5/26/17	5/26/17
DW30	CR-46R	5/24/17	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	5/26/17	5/26/17
SE61	CR-46	10/14/16	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	10/19/16	10/19/16
SE61	CR-46R	10/14/16	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	10/19/16	10/19/16
SE62	CR-46	1/18/17	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	1/23/17	1/23/17
SE62	CR-46R	1/18/17	Hydroxide	2320B	<	1.1	1.1	10	mg/L	ND, U	FGL Env.	1/23/17	1/23/17
SE64	CR-46	4/6/17	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	4/12/17	4/12/17
SE64	CR-46R	4/6/17	Hydroxide	2320B	<	1.1	1.1	10	mg/L	U, ND	FGL Env.	4/12/17	4/12/17
DW27	CR-46	8/24/16	Nitrogen, Total Kjeldahl	EPA 351.2	=	0.695	0.32	0.5	mg/L	Jb	FGL Env.	8/27/16	8/29/16
DW27	CR-46R	8/24/16	Nitrogen, Total Kjeldahl	EPA 351.2	=	1.67	0.32	0.5	mg/L	b	FGL Env.	8/27/16	8/29/16
DW28	CR-46	12/5/16	Nitrogen, Total Kjeldahl	EPA 351.2	<	0.32	0.32	0.5	mg/L	U, ND	FGL Env.	12/7/16	12/8/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW28	CR-46R	12/5/16	Nitrogen, Total Kjeldahl	EPA 351.2	<	0.32	0.32	0.5	mg/L	U, ND	FGL Env.	12/7/16	12/8/16
DW29	CR-46	3/2/17	Nitrogen, Total Kjeldahl	EPA 351.2	<	0.32	0.32	0.5	mg/L	U, b, ND	FGL Env.	3/6/17	3/7/17
DW29	CR-46R	3/2/17	Nitrogen, Total Kjeldahl	EPA 351.2	=	0.409	0.32	0.5	mg/L	J	FGL Env.	3/7/17	3/8/17
DW30	CR-46	5/24/17	Nitrogen, Total Kjeldahl	EPA 351.2	<	0.19	0.19	0.5	mg/L	U, ND	FGL Env.	5/26/17	5/30/17
DW30	CR-46R	5/24/17	Nitrogen, Total Kjeldahl	EPA 351.2	<	0.19	0.19	0.5	mg/L	U, ND	FGL Env.	5/26/17	5/30/17
SE61	CR-46	10/14/16	Nitrogen, Total Kjeldahl	EPA 351.2	=	2.98	0.32	0.5	mg/L		FGL Env.	10/20/16	10/21/16
SE61	CR-46R	10/14/16	Nitrogen, Total Kjeldahl	EPA 351.2	=	4.11	0.32	0.5	mg/L		FGL Env.	10/20/16	10/21/16
SE62	CR-46	1/18/17	Nitrogen, Total Kjeldahl	EPA 351.2	<	0.32	0.32	0.5	mg/L	ND, U, l	FGL Env.	1/23/17	1/24/17
SE62	CR-46R	1/18/17	Nitrogen, Total Kjeldahl	EPA 351.2	<	0.32	0.32	0.5	mg/L	ND, U, l	FGL Env.	1/23/17	1/24/17
SE64	CR-46	4/6/17	Nitrogen, Total Kjeldahl	EPA 351.2	=	0.718	0.32	0.5	mg/L		FGL Env.	4/19/17	4/20/17
SE64	CR-46R	4/6/17	Nitrogen, Total Kjeldahl	EPA 351.2	=	1.41	0.32	0.5	mg/L		FGL Env.	4/19/17	4/20/17
DW27	CR-46	8/24/16	Oil and Grease	1664	=	2.72	1.5	3.3	mg/L	J	FGL Env.	9/1/16	9/2/16
DW27	CR-46R	8/24/16	Oil and Grease	1664	<	1.5	1.5	3.3	mg/L	U	FGL Env.	9/1/16	9/2/16
DW28	CR-46	12/5/16	Oil and Grease	1664A	<	1.5	1.5	3.3	mg/L	U, b, ND	FGL Env.	12/14/16	12/14/16
DW28	CR-46R	12/5/16	Oil and Grease	1664A	<	1.5	1.5	3.3	mg/L	U, b, ND	FGL Env.	12/14/16	12/14/16
DW29	CR-46	3/2/17	Oil and Grease	1664A	=	4.4	1.5	3.3	mg/L		FGL Env.	3/13/17	3/13/17
DW29	CR-46R	3/2/17	Oil and Grease	1664A	<	1.5	1.5	3.3	mg/L	U, ND	FGL Env.	3/13/17	3/13/17
DW30	CR-46	5/24/17	Oil and Grease	1664A	<	1.5	1.5	3.3	mg/L	U, ND	FGL Env.	6/4/17	6/5/17
DW30	CR-46R	5/24/17	Oil and Grease	1664A	=	5.98	1.5	3.3	mg/L		FGL Env.	6/4/17	6/5/17
SE61	CR-46	10/14/16	Oil and Grease	1664A	=	1.68	1.5	3.3	mg/L	J	FGL Env.	10/27/16	10/28/16
SE61	CR-46R	10/14/16	Oil and Grease	1664A	<	1.5	1.5	3.3	mg/L	U	FGL Env.	10/27/16	10/28/16
SE62	CR-46	1/18/17	Oil and Grease	1664A	<	1.5	1.5	3.3	mg/L	ND, U	FGL Env.	2/8/17	2/8/17
SE62	CR-46R	1/18/17	Oil and Grease	1664A	=	1.94	1.5	3.3	mg/L	J	FGL Env.	2/8/17	2/8/17
SE64	CR-46	4/6/17	Oil and Grease	1664A	=	1.52	1.5	3.3	mg/L	J	FGL Env.	4/17/17	4/18/17
SE64	CR-46R	4/6/17	Oil and Grease	1664A	<	1.5	1.5	3.3	mg/L	U, ND	FGL Env.	4/17/17	4/18/17
DW27	CR-46	8/24/16	pH - Field	Field	=	7.9	-	0-14	pH Units		Field	-	-
DW27	CR-46R	8/24/16	pH - Field	Field	=	7.52	-	0-14	pH Units		Field	-	-
DW27	CR-42	8/24/16	pH - Field	Field	=	7.32	-	0-14	pH Units		Field	-	-
DW27	CR-41	8/24/16	pH - Field	Field	=	7.35	-	0-14	pH Units		Field	-	-
DW27	CR-41R	8/24/16	pH - Field	Field	=	8.08	-	0-14	pH Units		Field	-	-
DW27	CR-39	8/24/16	pH - Field	Field	=	8.16	-	0-14	pH Units		Field	-	-
DW27	CR-39R	8/24/16	pH - Field	Field	=	8.63	-	0-14	pH Units		Field	-	-

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW28	CR-46	12/5/16	pH - Field	Field	=	7.77	-	0-14	pH Units		Field	-	-
DW28	CR-46R	12/5/16	pH - Field	Field	=	7.4	-	0-14	pH Units		Field	-	-
DW28	CR-42	12/5/16	pH - Field	Field	=	7.78	-	0-14	pH Units		Field	-	-
DW28	CR-41	12/5/16	pH - Field	Field	=	7.46	-	0-14	pH Units		Field	-	-
DW28	CR-41R	12/5/16	pH - Field	Field	=	8.05	-	0-14	pH Units		Field	-	-
DW28	CR-39	12/5/16	pH - Field	Field	=	7.45	-	0-14	pH Units		Field	-	-
DW28	CR-39R	12/5/16	pH - Field	Field	=	8.09	-	0-14	pH Units		Field	-	-
DW29	CR-1R	3/2/17	pH - Field	Field	=	8.19	-	0-14	pH Units		Field	-	-
DW29	CR-46	3/2/17	pH - Field	Field	=	6.73	-	0-14	pH Units		Field	-	-
DW29	CR-46R	3/2/17	pH - Field	Field	=	7.42	-	0-14	pH Units		Field	-	-
DW29	CR-42	3/2/17	pH - Field	Field	=	6.84	-	0-14	pH Units		Field	-	-
DW29	CR-41	3/2/17	pH - Field	Field	=	7.82	-	0-14	pH Units		Field	-	-
DW29	CR-41R	3/2/17	pH - Field	Field	=	8.35	-	0-14	pH Units		Field	-	-
DW29	CR-39	3/2/17	pH - Field	Field	=	7.35	-	0-14	pH Units		Field	-	-
DW29	CR-39R	3/2/17	pH - Field	Field	=	8.16	-	0-14	pH Units		Field	-	-
DW30	CR-1R	5/24/17	pH - Field	Field	=	8.37	-	0-14	pH Units		Field	-	-
DW30	CR-46	5/24/17	pH - Field	Field	=	8.01	-	0-14	pH Units		Field	-	-
DW30	CR-46R	5/24/17	pH - Field	Field	=	8.17	-	0-14	pH Units		Field	-	-
DW30	CR-42	5/24/17	pH - Field	Field	=	8.06	-	0-14	pH Units		Field	-	-
DW30	CR-41	5/24/17	pH - Field	Field	=	7.85	-	0-14	pH Units		Field	-	-
DW30	CR-41R	5/24/17	pH - Field	Field	=	8.28	-	0-14	pH Units		Field	-	-
DW30	CR-39	5/24/17	pH - Field	Field	=	7.5	-	0-14	pH Units		Field	-	-
DW30	CR-39R	5/24/17	pH - Field	Field	=	8.44	-	0-14	pH Units		Field	-	-
SE61	CR-39	10/14/16	pH - Field		=	7.59	-	0-14	pH Units		Field	-	-
SE61	CR-39R	10/14/16	pH - Field		=	7.86	-	0-14	pH Units		Field	-	-
SE61	CR-41	10/14/16	pH - Field		=	7.57	-	0-14	pH Units		Field	-	-
SE61	CR-41R	10/14/16	pH - Field		=	7.5	-	0-14	pH Units		Field	-	-
SE61	CR-42	10/14/16	pH - Field		=	7.37	-	0-14	pH Units		Field	-	-
SE61	CR-46	10/14/16	pH - Field		=	7.56	-	0-14	pH Units		Field	-	-
SE61	CR-46R	10/14/16	pH - Field		=	7.63	-	0-14	pH Units		Field	-	-
SE61	NW-RAIN	10/14/16	pH - Field		=	8.02	-	0-14	pH Units		Field	-	-
SE61	NE-RAIN	10/14/16	pH - Field		=	6.13	-	0-14	pH Units		Field	-	-
SE61	SC-1 RAIN	10/14/16	pH - Field		=	7.62	-	0-14	pH Units		Field	-	-
SE62	CR-1R	1/18/17	pH - Field		=	9.95	-	0-14	pH Units		Field	-	-

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-39	1/18/17	pH - Field		=	8.09	-	0-14	pH Units		Field	-	-
SE62	CR-39R	1/18/17	pH - Field		=	8.24	-	0-14	pH Units		Field	-	-
SE62	CR-41	1/18/17	pH - Field		=	8.39	-	0-14	pH Units		Field	-	-
SE62	CR-41R	1/18/17	pH - Field		=	7.86	-	0-14	pH Units		Field	-	-
SE62	CR-42	1/18/17	pH - Field		=	7.92	-	0-14	pH Units		Field	-	-
SE62	CR-46	1/18/17	pH - Field		=	7.46	-	0-14	pH Units		Field	-	-
SE62	CR-46R	1/18/17	pH - Field		=	7.67	-	0-14	pH Units		Field	-	-
SE62	NE-RAIN	1/18/17	pH - Field		=	6.65	-	0-14	pH Units		Field	-	-
SE62	NW-RAIN	1/18/17	pH - Field		=	8.32	-	0-14	pH Units		Field	-	-
SE62	SC-1 RAIN	1/18/17	pH - Field		=	5.4	-	0-14	pH Units		Field	-	-
SE63	CR-1R	2/16/17	pH - Field		=	7.48	-	0-14	pH Units		Field	-	-
SE63	CR-39	2/16/17	pH - Field		=	7.54	-	0-14	pH Units		Field	-	-
SE63	CR-39R	2/16/17	pH - Field		=	6.9	-	0-14	pH Units		Field	-	-
SE63	CR-41	2/16/17	pH - Field		=	7.53	-	0-14	pH Units		Field	-	-
SE63	CR-41R	2/16/17	pH - Field		=	8.01	-	0-14	pH Units		Field	-	-
SE63	CR-42	2/16/17	pH - Field		=	7.76	-	0-14	pH Units		Field	-	-
SE63	CR-46	2/16/17	pH - Field		=	7.91	-	0-14	pH Units		Field	-	-
SE63	CR-46R	2/16/17	pH - Field		=	7.67	-	0-14	pH Units		Field	-	-
SE64	CR-1R	4/6/17	pH - Field		=	8.2	-	0-14	pH Units		Field	-	-
SE64	CR-39	4/6/17	pH - Field		=	8.02	-	0-14	pH Units		Field	-	-
SE64	CR-39R	4/6/17	pH - Field		=	8.55	-	0-14	pH Units		Field	-	-
SE64	CR-41	4/6/17	pH - Field		=	8.33	-	0-14	pH Units		Field	-	-
SE64	CR-41R	4/6/17	pH - Field		=	8.21	-	0-14	pH Units		Field	-	-
SE64	CR-42	4/6/17	pH - Field		=	6.99	-	0-14	pH Units		Field	-	-
SE64	CR-46	4/6/17	pH - Field		=	6.98	-	0-14	pH Units		Field	-	-
SE64	CR-46R	4/6/17	pH - Field		=	7.18	-	0-14	pH Units		Field	-	-
SE64	NE-RAIN	4/6/17	pH - Field		=	7.36	-	0-14	pH Units		Field	-	-
SE64	NW-RAIN	4/6/17	pH - Field		=	8.62	-	0-14	pH Units		Field	-	-
SE64	SC-1 RAIN	4/6/17	pH - Field		=	7.35	-	0-14	pH Units		Field	-	-
DW27	CR-46	8/24/16	Solids, Total Suspended (TSS)	2540D	=	4.58	0.019	1.1	mg/L		FGL Env.	8/24/16	8/25/16
DW27	CR-46R	8/24/16	Solids, Total Suspended (TSS)	2540D	=	6.72	0.019	1.1	mg/L		FGL Env.	8/24/16	8/25/16
DW28	CR-46	12/5/16	Solids, Total Suspended (TSS)	2540D	=	0.8	0.019	1.2	mg/L	J	FGL Env.	12/5/16	12/6/16
DW28	CR-46R	12/5/16	Solids, Total Suspended (TSS)	2540D	=	3.52	0.019	1.1	mg/L		FGL Env.	12/5/16	12/6/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW29	CR-46	3/2/17	Solids, Total Suspended (TSS)	2540D	=	45.8	0.019	2.2	mg/L		FGL Env.	3/2/17	3/3/17
DW29	CR-46R	3/2/17	Solids, Total Suspended (TSS)	2540D	=	2.26	0.019	1.1	mg/L		FGL Env.	3/2/17	3/3/17
DW30	CR-46	5/24/17	Solids, Total Suspended (TSS)	2540D	=	3.09	0.019	1.1	mg/L		FGL Env.	5/24/17	5/25/17
DW30	CR-46R	5/24/17	Solids, Total Suspended (TSS)	2540D	=	8.24	0.019	1.9	mg/L		FGL Env.	5/24/17	5/25/17
SE61	CR-46	10/14/16	Solids, Total Suspended (TSS)	2540D	=	45.6	0.019	4	mg/L		FGL Env.	10/17/16	10/18/16
SE61	CR-46R	10/14/16	Solids, Total Suspended (TSS)	2540D	=	64.9	0.019	6.7	mg/L		FGL Env.	10/17/16	10/18/16
SE62	CR-46	1/18/17	Solids, Total Suspended (TSS)	2540D	=	72.4	0.019	4	mg/L		FGL Env.	1/21/17	1/22/17
SE62	CR-46R	1/18/17	Solids, Total Suspended (TSS)	2540D	=	19.9	0.019	2.5	mg/L		FGL Env.	1/21/17	1/22/17
SE63	CR-46	2/16/17	Solids, Total Suspended (TSS)	2540D	=	23.9	0.019	3.2	mg/L	b	FGL Env.	2/16/17	2/17/17
SE63	CR-46R	2/16/17	Solids, Total Suspended (TSS)	2540D	=	50	0.019	2	mg/L	b	FGL Env.	2/16/17	2/17/17
SE64	CR-46	4/6/17	Solids, Total Suspended (TSS)	2540D	=	25.7	0.019	2	mg/L	I	FGL Env.	4/7/17	4/8/17
SE64	CR-46R	4/6/17	Solids, Total Suspended (TSS)	2540D	=	22.7	0.019	2.6	mg/L	I	FGL Env.	4/7/17	4/8/17
DW27	CR-46	8/24/16	Specific Conductance	2510B	=	451	-	1	µmhos/cm		FGL Env.	8/26/16	8/26/16
DW27	CR-46R	8/24/16	Specific Conductance	2510B	=	392	-	1	µmhos/cm		FGL Env.	8/26/16	8/26/16
DW28	CR-46	12/5/16	Specific Conductance	2510B	=	250	-	1	µmhos/cm		FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Specific Conductance	2510B	=	59.1	-	1	µmhos/cm		FGL Env.	12/7/16	12/11/16
DW29	CR-46	3/2/17	Specific Conductance	2510B	=	124	-	1	µmhos/cm		FGL Env.	3/6/17	3/6/17
DW29	CR-46R	3/2/17	Specific Conductance	2510B	=	179	-	1	µmhos/cm		FGL Env.	3/6/17	3/6/17
DW30	CR-46	5/24/17	Specific Conductance	2510B	=	441	-	1	µmhos/cm		FGL Env.	5/26/17	5/26/17
DW30	CR-46R	5/24/17	Specific Conductance	2510B	=	170	-	1	µmhos/cm		FGL Env.	5/26/17	5/26/17
SE61	CR-46	10/14/16	Specific Conductance	2510B	=	62.2	-	1	µmhos/cm		FGL Env.	10/19/16	10/19/16
SE61	CR-46R	10/14/16	Specific Conductance	2510B	=	256	-	1	µmhos/cm		FGL Env.	10/19/16	10/19/16
SE62	CR-46	1/18/17	Specific Conductance	2510B	=	29.3	-	1	µmhos/cm		FGL Env.	1/23/17	1/23/17
SE62	CR-46R	1/18/17	Specific Conductance	2510B	=	162	-	1	µmhos/cm		FGL Env.	1/23/17	1/23/17
SE64	CR-46	4/6/17	Specific Conductance	2510B	=	36.2	0.16	1	µmhos/cm		FGL Env.	4/12/17	4/12/17
SE64	CR-46R	4/6/17	Specific Conductance	2510B	=	153	0.16	1	µmhos/cm		FGL Env.	4/12/17	4/12/17
DW27	CR-46	8/24/16	Temperature - Field	Field	=	22.38	-	0.1	°C		Field	-	-
DW27	CR-46R	8/24/16	Temperature - Field	Field	=	24.07	-	0.1	°C		Field	-	-
DW27	CR-42	8/24/16	Temperature - Field	Field	=	23.06	-	0.1	°C		Field	-	-
DW27	CR-41	8/24/16	Temperature - Field	Field	=	21.64	-	0.1	°C		Field	-	-
DW27	CR-41R	8/24/16	Temperature - Field	Field	=	22.49	-	0.1	°C		Field	-	-
DW27	CR-39	8/24/16	Temperature - Field	Field	=	24.58	-	0.1	°C		Field	-	-

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW27	CR-39R	8/24/16	Temperature - Field	Field	=	25.63	-	0.1	°C		Field	-	-
DW28	CR-46	12/5/16	Temperature - Field	Field	=	15.4	-	0.1	°C		Field	-	-
DW28	CR-46R	12/5/16	Temperature - Field	Field	=	10.1	-	0.1	°C		Field	-	-
DW28	CR-42	12/5/16	Temperature - Field	Field	=	15.3	-	0.1	°C		Field	-	-
DW28	CR-41	12/5/16	Temperature - Field	Field	=	14.98	-	0.1	°C		Field	-	-
DW28	CR-41R	12/5/16	Temperature - Field	Field	=	11.93	-	0.1	°C		Field	-	-
DW28	CR-39	12/5/16	Temperature - Field	Field	=	12.3	-	0.1	°C		Field	-	-
DW28	CR-39R	12/5/16	Temperature - Field	Field	=	10.9	-	0.1	°C		Field	-	-
DW29	CR-1R	3/2/17	Temperature - Field	Field	=	12.9	-	0.1	°C		Field	-	-
DW29	CR-46	3/2/17	Temperature - Field	Field	=	15.68	-	0.1	°C		Field	-	-
DW29	CR-46R	3/2/17	Temperature - Field	Field	=	14.7	-	0.1	°C		Field	-	-
DW29	CR-42	3/2/17	Temperature - Field	Field	=	16.27	-	0.1	°C		Field	-	-
DW29	CR-41	3/2/17	Temperature - Field	Field	=	18.3	-	0.1	°C		Field	-	-
DW29	CR-41R	3/2/17	Temperature - Field	Field	=	12.9	-	0.1	°C		Field	-	-
DW29	CR-39	3/2/17	Temperature - Field	Field	=	14.7	-	0.1	°C		Field	-	-
DW29	CR-39R	3/2/17	Temperature - Field	Field	=	12.2	-	0.1	°C		Field	-	-
DW30	CR-1R	5/24/17	Temperature - Field	Field	=	28.1	-	0.1	°C		Field	-	-
DW30	CR-46	5/24/17	Temperature - Field	Field	=	19.7	-	0.1	°C		Field	-	-
DW30	CR-46R	5/24/17	Temperature - Field	Field	=	27.9	-	0.1	°C		Field	-	-
DW30	CR-42	5/24/17	Temperature - Field	Field	=	20.3	-	0.1	°C		Field	-	-
DW30	CR-41	5/24/17	Temperature - Field	Field	=	20.9	-	0.1	°C		Field	-	-
DW30	CR-41R	5/24/17	Temperature - Field	Field	=	25.3	-	0.1	°C		Field	-	-
DW30	CR-39	5/24/17	Temperature - Field	Field	=	22.5	-	0.1	°C		Field	-	-
DW30	CR-39R	5/24/17	Temperature - Field	Field	=	22.3	-	0.1	°C		Field	-	-
SE61	CR-39	10/14/16	Temperature - Field		=	19.18	-	0.01	°C		Field	-	-
SE61	CR-39R	10/14/16	Temperature - Field		=	19.11	-	0.01	°C		Field	-	-
SE61	CR-41	10/14/16	Temperature - Field		=	22.04	-	0.01	°C		Field	-	-
SE61	CR-41R	10/14/16	Temperature - Field		=	18.13	-	0.01	°C		Field	-	-
SE61	CR-42	10/14/16	Temperature - Field		=	21.45	-	0.01	°C		Field	-	-
SE61	CR-46	10/14/16	Temperature - Field		=	19.81	-	0.01	°C		Field	-	-
SE61	CR-46R	10/14/16	Temperature - Field		=	20.79	-	0.01	°C		Field	-	-
SE61	NW-RAIN	10/14/16	Temperature - Field		=	16.61	-	0.01	°C		Field	-	-
SE61	NE-RAIN	10/14/16	Temperature - Field		=	16.43	-	0.01	°C		Field	-	-
SE61	SC-1 RAIN	10/14/16	Temperature - Field		=	17.24	-	0.01	°C		Field	-	-

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
SE62	CR-1R	1/18/17	Temperature - Field		=	8.9	-	0.01	°C		Field	-	-
SE62	CR-39	1/18/17	Temperature - Field		=	10.9	-	0.01	°C		Field	-	-
SE62	CR-39R	1/18/17	Temperature - Field		=	9.8	-	0.01	°C		Field	-	-
SE62	CR-41	1/18/17	Temperature - Field		=	10	-	0.01	°C		Field	-	-
SE62	CR-41R	1/18/17	Temperature - Field		=	9.7	-	0.01	°C		Field	-	-
SE62	CR-42	1/18/17	Temperature - Field		=	9.28	-	0.01	°C		Field	-	-
SE62	CR-46	1/18/17	Temperature - Field		=	9.18	-	0.01	°C		Field	-	-
SE62	CR-46R	1/18/17	Temperature - Field		=	9.69	-	0.01	°C		Field	-	-
SE62	NE-RAIN	1/18/17	Temperature - Field		=	8.01	-	0.01	°C		Field	-	-
SE62	NW-RAIN	1/18/17	Temperature - Field		=	8.4	-	0.01	°C		Field	-	-
SE62	SC-1 RAIN	1/18/17	Temperature - Field		=	8.5	-	0.01	°C		Field	-	-
SE63	CR-1R	2/16/17	Temperature - Field		=	11.72	-	0.01	°C		Field	-	-
SE63	CR-39	2/16/17	Temperature - Field		=	14.43	-	0.01	°C		Field	-	-
SE63	CR-39R	2/16/17	Temperature - Field		=	12.21	-	0.01	°C		Field	-	-
SE63	CR-41	2/16/17	Temperature - Field		=	16.6	-	0.01	°C		Field	-	-
SE63	CR-41R	2/16/17	Temperature - Field		=	12.34	-	0.01	°C		Field	-	-
SE63	CR-42	2/16/17	Temperature - Field		=	14.98	-	0.01	°C		Field	-	-
SE63	CR-46	2/16/17	Temperature - Field		=	14.62	-	0.01	°C		Field	-	-
SE63	CR-46R	2/16/17	Temperature - Field		=	12.47	-	0.01	°C		Field	-	-
SE64	CR-1R	4/6/17	Temperature - Field		=	15.88	-	0.01	°C		Field	-	-
SE64	CR-39	4/6/17	Temperature - Field		=	17.1	-	0.01	°C		Field	-	-
SE64	CR-39R	4/6/17	Temperature - Field		=	16.5	-	0.01	°C		Field	-	-
SE64	CR-41	4/6/17	Temperature - Field		=	16.1	-	0.01	°C		Field	-	-
SE64	CR-41R	4/6/17	Temperature - Field		=	16.8	-	0.01	°C		Field	-	-
SE64	CR-42	4/6/17	Temperature - Field		=	15.18	-	0.01	°C		Field	-	-
SE64	CR-46	4/6/17	Temperature - Field		=	15.18	-	0.01	°C		Field	-	-
SE64	CR-46R	4/6/17	Temperature - Field		=	16.37	-	0.01	°C		Field	-	-
SE64	NE-RAIN	4/6/17	Temperature - Field		=	11.46	-	0.01	°C		Field	-	-
SE64	NW-RAIN	4/6/17	Temperature - Field		=	11.6	-	0.01	°C		Field	-	-
SE64	SC-1 RAIN	4/6/17	Temperature - Field		=	12.03	-	0.01	°C		Field	-	-
DW27	CR-46	8/24/16	TOC	5310C	=	2.63	0.15	0.5	mg/L		FGL Env.	9/3/16	9/4/16
DW27	CR-46R	8/24/16	TOC	5310C	=	5.98	0.15	0.5	mg/L		FGL Env.	9/3/16	9/4/16
DW28	CR-46	12/5/16	TOC	5310C	=	2.65	0.15	0.5	mg/L		FGL Env.	12/11/16	12/11/16

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW28	CR-46R	12/5/16	TOC	5310C	=	3.04	0.15	0.5	mg/L		FGL Env.	12/11/16	12/11/16
DW29	CR-46	3/2/17	TOC	5310C	=	3.65	0.15	0.5	mg/L	h	FGL Env.	3/13/17	3/13/17
DW29	CR-46R	3/2/17	TOC	5310C	=	2.27	0.15	0.5	mg/L	h	FGL Env.	3/13/17	3/13/17
DW30	CR-46	5/24/17	TOC	5310C	=	1.5	0.15	0.5	mg/L	1*	FGL Env.	6/4/17	6/4/17
DW30	CR-46R	5/24/17	TOC	5310C	=	4.46	0.15	0.5	mg/L	1*	FGL Env.	6/4/17	6/4/17
SE61	CR-46	10/14/16	TOC	5310C	=	23.6	0.015	0.5	mg/L		FGL Env.	10/22/16	10/23/16
SE61	CR-46R	10/14/16	TOC	5310C	=	68.9	0.015	2.5	mg/L		FGL Env.	10/23/16	10/23/16
SE62	CR-46	1/18/17	TOC	5310C	=	2.51	0.15	0.5	mg/L	h	FGL Env.	1/21/17	1/22/17
SE62	CR-46R	1/18/17	TOC	5310C	=	4.31	0.15	0.5	mg/L	h	FGL Env.	1/21/17	1/22/17
SE64	CR-46	4/6/17	TOC	5310C	=	6.75	0.15	0.5	mg/L	b, h	FGL Env.	4/24/17	4/24/17
SE64	CR-46R	4/6/17	TOC	5310C	=	9.17	0.15	0.5	mg/L	b,h	FGL Env.	4/24/17	4/24/17
DW27	CR-46	8/24/16	Total Dissolved Solids (TFR)	2540C	=	289	5.8	20	mg/L	b	FGL Env.	8/26/16	8/29/16
DW27	CR-46R	8/24/16	Total Dissolved Solids (TFR)	2540C	=	232	5.8	20	mg/L	b	FGL Env.	8/26/16	8/29/16
DW28	CR-46	12/5/16	Total Dissolved Solids (TFR)	2540C	=	156	5.8	20	mg/L		FGL Env.	12/7/16	12/8/16
DW28	CR-46R	12/5/16	Total Dissolved Solids (TFR)	2540C	=	46.1	5.8	11	mg/L		FGL Env.	12/7/16	12/8/16
DW29	CR-46	3/2/17	Total Dissolved Solids (TFR)	2540C	=	65.3	5.8	20	mg/L		FGL Env.	3/7/17	3/8/17
DW29	CR-46R	3/2/17	Total Dissolved Solids (TFR)	2540C	=	122	5.8	20	mg/L		FGL Env.	3/7/17	3/8/17
DW30	CR-46	5/24/17	Total Dissolved Solids (TFR)	2540C	=	271	5.8	20	mg/L	I, b	FGL Env.	5/27/17	5/30/17
DW30	CR-46R	5/24/17	Total Dissolved Solids (TFR)	2540C	=	121	5.8	20	mg/L	I, b	FGL Env.	5/27/17	5/30/17
SE61	CR-46	10/14/16	Total Dissolved Solids (TFR)	2540C	=	52.9	5.8	11	mg/L	b	FGL Env.	10/19/16	10/20/16
SE61	CR-46R	10/14/16	Total Dissolved Solids (TFR)	2540C	=	203	5.8	20	mg/L	b	FGL Env.	10/19/16	10/20/16
SE62	CR-46	1/18/17	Total Dissolved Solids (TFR)	2540C	=	15.3	5.8	11	mg/L	b	FGL Env.	1/20/17	1/23/17
SE62	CR-46R	1/18/17	Total Dissolved Solids (TFR)	2540C	=	99.4	5.8	20	mg/L	b	FGL Env.	1/20/17	1/23/17
SE64	CR-46	4/6/17	Total Dissolved Solids (TFR)	2540C	=	29	5.8	11	mg/L		FGL Env.	4/11/17	4/12/17
SE64	CR-46R	4/6/17	Total Dissolved Solids (TFR)	2540C	=	109	5.8	20	mg/L		FGL Env.	4/11/17	4/12/17
DW27	CR-46	8/24/16	Total Hardness as CaCO3	EPA 200.7	=	157	0.0075	2.5	mg/L		FGL Env.	8/31/16	8/31/16
DW27	CR-46R	8/24/16	Total Hardness as CaCO3	EPA 200.7	=	99.9	0.0075	2.5	mg/L		FGL Env.	8/31/16	8/31/16
DW28	CR-46	12/5/16	Total Hardness as CaCO3	EPA 200.7	=	76.6	0.0075	2.5	mg/L		FGL Env.	12/7/16	12/7/16
DW28	CR-46R	12/5/16	Total Hardness as CaCO3	EPA 200.7	=	19.7	0.0075	2.5	mg/L		FGL Env.	12/7/16	12/7/16
DW29	CR-46	3/2/17	Total Hardness as CaCO3	EPA 200.7	=	51.4	0.0075	2.5	mg/L	P	FGL Env.	3/7/17	3/7/17
DW29	CR-46R	3/2/17	Total Hardness as CaCO3	EPA 200.7	=	64.1	0.0075	2.5	mg/L	P	FGL Env.	3/7/17	3/7/17
DW30	CR-46	5/24/17	Total Hardness as CaCO3	EPA 200.7	=	163	0.0075	2.5	mg/L		FGL Env.	6/2/17	6/5/17

City of Stockton and County of San Joaquin
Ambient Monitoring Program 2016-2017 Data

Event	Site Code	Date Sampled	Analyte	Method	Q	Result	MDL	RL/ML	Units	Flag	Lab Name	Prep Date	Analysis Date
DW30	CR-46R	5/24/17	Total Hardness as CaCO3	EPA 200.7	=	65.3	0.0075	2.5	mg/L		FGL Env.	6/5/17	6/5/17
SE61	CR-46	10/14/16	Total Hardness as CaCO3	EPA 200.7	=	23.2	0.0075	2.5	mg/L	P	FGL Env.	10/21/16	10/24/16
SE61	CR-46R	10/14/16	Total Hardness as CaCO3	EPA 200.7	=	75.1	0.0075	2.5	mg/L	P	FGL Env.	10/21/16	10/24/16
SE62	CR-46	1/18/17	Total Hardness as CaCO3	EPA 200.7	=	11.7	0.0075	2.5	mg/L	I	FGL Env.	1/24/17	1/24/17
SE62	CR-46R	1/18/17	Total Hardness as CaCO3	EPA 200.7	=	52.7	0.0075	2.5	mg/L	I	FGL Env.	1/24/17	1/24/17
SE64	CR-46	4/6/17	Total Hardness as CaCO3	EPA 200.7	=	13.7	0.0075	2.5	mg/L	h, P	FGL Env.	4/18/17	4/19/17
SE64	CR-46R	4/6/17	Total Hardness as CaCO3	EPA 200.7	=	59.4	0.0075	2.5	mg/L		FGL Env.	4/19/17	4/19/17
DW27	CR-46	8/24/16	Turbidity	2130B	=	2.89	0.021	0.2	NTU		FGL Env.	8/25/16	8/25/16
DW27	CR-46R	8/24/16	Turbidity	2130B	=	6.41	0.021	0.2	NTU		FGL Env.	8/25/16	8/25/16
DW28	CR-46	12/5/16	Turbidity	2130B	=	1.2	0.021	0.2	NTU		FGL Env.	12/5/16	12/5/16
DW28	CR-46R	12/5/16	Turbidity	2130B	=	5.28	0.021	0.2	NTU		FGL Env.	12/5/16	12/5/16
DW29	CR-46	3/2/17	Turbidity	2130B	=	23.9	0.021	0.2	NTU		FGL Env.	3/2/17	3/2/17
DW29	CR-46R	3/2/17	Turbidity	2130B	=	5.27	0.021	0.2	NTU		FGL Env.	3/2/17	3/2/17
DW30	CR-46	5/24/17	Turbidity	2130B	=	1.71	0.021	0.2	NTU		FGL Env.	5/25/17	5/25/17
DW30	CR-46R	5/24/17	Turbidity	2130B	=	6.58	0.021	0.2	NTU		FGL Env.	5/25/17	5/25/17
SE61	CR-46	10/14/16	Turbidity	2130B	=	48.2	0.021	0.2	NTU		FGL Env.	10/15/16	10/15/16
SE61	CR-46R	10/14/16	Turbidity	2130B	=	46.3	0.021	0.2	NTU		FGL Env.	10/15/16	10/15/16
SE62	CR-46	1/18/17	Turbidity	2130B	=	61.7	0.021	0.2	NTU		FGL Env.	1/19/17	1/19/17
SE62	CR-46R	1/18/17	Turbidity	2130B	=	21.6	0.021	0.2	NTU		FGL Env.	1/19/17	1/19/17
SE64	CR-46	4/6/17	Turbidity	2130B	=	20.2	0.021	0.2	NTU		FGL Env.	4/7/17	4/7/17
SE64	CR-46R	4/6/17	Turbidity	2130B	=	13.2	0.021	0.2	NTU		FGL Env.	4/7/17	4/7/17

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Appendix C
2016-2017 Data Summary Tables

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CALAVERAS RIVER 2016-2017 DATA FOR POLLUTANTS OF CONCERN

Fecal Indicator Bacteria

Event	CR-1R	CR-39	CR-39R	CR-41	CR-41R	CR-42	CR-46	CR-46R	WQO
***E. Coli* (MPN/100mL)**									
DW27	-	4.1	3	13.4	7.5	387.3	2	14.8	235
DW28	-	<1	6.3	1	<1	4.1	13.5	<1	235
DW29	2	<1	5.2	2	6.3	4.1	45	4.1	235
DW30	63	10	41	241	86	6867	2046	97	235
SE61	-	209.8	16	2419.6	80.5	1203.3	344.8	461.1	235
SE62	5.2	39.9	17.1	410.6	36.4	206.4	204.6	14.8	235
SE63	52	31	86	512	110	1782	6867	52	235
SE64	<1	51.2	8.6	162.4	11	980.4	142.1	193.5	235
Fecal Coliform (MPN/100mL)									
DW27	-	700	490	330	230	7900	1300	220	400
DW28	-	<18	20	45	20	78	45	45	400
DW29	20	<18	78	68	20	230	1300	45	400
DW30	45	<18	170	310	78	7000	7900	700	400
SE61	-	13000	700	79000	2300	49000	33000	14000	400
SE62	78	460	330	3300	490	3300	2300	490	400
SE63	220	40	210	1100	140	7900	23000	45	400
SE64	78	1300	93	3300	490	11000	3300	7000	400

Mercury

Event	CR-1R	CR-39	CR-39R	CR-41	CR-41R	CR-42	CR-46	CR-46R	NE-RAIN	NW-RAIN	SC-1 RAIN
Methyl Mercury, Total (ng/L)											
DW27	-	0.39	0.05	0.04	0.05	0.08	<0.02	0.05	-	-	-
DW28	-	0.05	0.02	<0.02	0.03	0.04	0.02	0.05	-	-	-
DW29	0.07	<0.02	0.12	0.02	0.09	0.05	0.05	0.09	-	-	-
DW30	0.10	0.07	0.13	<0.02	0.17	0.10	0.02	0.16	-	-	-
SE61	-	0.24	0.03	0.98	0.04	0.13	0.15	0.26	0.03	0.07	0.05
SE62	0.06	0.09	0.07	0.09	0.05	0.07	0.08	0.06	0.15	0.03	0.05
SE64	0.12	0.21	0.11	0.17	0.13	0.13	0.11	0.27	0.05	0.07	0.08
Mercury, Total (ng/L)											
DW27	-	1.4	0.44	0.91	0.65	1.2	0.76	0.59	-	-	-
DW28	-	0.89	0.69	1.1	1.0	1.3	0.87	1.4	-	-	-
DW29	6.3	1.1	6.5	1.2	6.6	2.7	2.1	6.4	-	-	-
DW30	1.6	1.4	1.9	0.9	1.7	1.8	1.2	2.1	-	-	-
SE61	-	9.0	1.2	95	0.88	26	20	14	2.5	4.0	4.1
SE62	6.6	5.1	6.4	19	8.4	12	19	7.1	9.7	13	11
SE64	2.2	6.0	2.1	18	2.6	12	15	7.4	14	13	17

Dissolved Oxygen

Event	CR-1R	CR-39	CR-39R	CR-41	CR-41R	CR-42	CR-46	CR-46R	NE-RAIN	NW-RAIN	SC-1 RAIN	WQO
Dissolved Oxygen (mg/L)												
DW27	-	5.43	8.62	6.96	7.6	3.41	4.25	6.66	-	-	-	>5 - 6
DW28	-	8.28	9.43	6.77	9.62	2.71	5.65	8.75	-	-	-	>5 - 6
DW29	12.08	9.01	10.45	7.19	10.55	5.02	5.63	9.44	-	-	-	>5 - 6
DW30	7.9	4.56	7.85	7.74	6.78	4.39	5.65	6.97	-	-	-	>5 - 6
SE61	-	8.35	7.61	7.11	7.39	7.58	8.92	9.45	8.38	13.42	9.63	>5 - 6
SE62	12.82	10.75	10.34	11.12	10.45	11.34	10.41	10.97	11.27	11.73	10.31	>5 - 6
SE63	11.45	9.02	10.75	7.59	10.83	8.44	8.57	10.04	-	-	-	>5 - 6
SE64	9.01	7.28	9.39	8.94	8.51	9.86	9.82	9.65	10.24	9.61	11.02	>5 - 6

Chlorpyrifos

Event	CR-1R	CR-39	CR-39R	CR-41	CR-41R	CR-42	CR-46	CR-46R	NE-RAIN	NW-RAIN	SC-1 RAIN	WQO
Chlorpyrifos (ng/L)												
DW27	-	<0.6	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	-	-	-	15
DW28	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	15
DW29	<0.5	0.6	<0.5	<0.5	<0.5	0.6	0.6	<0.5	-	-	-	15
DW30	1.1	<0.5	<0.5	<0.5	<0.5	0.6	<0.6	<0.5	-	-	-	15
SE61	-	<2	<2	36	<0.5	<5	<2	<2	5.7	<2	<0.5	15
SE62	<0.5	1.9	<0.5	4.2	0.7	6	4.6	0.6	12	7.3	8.7	15
SE64	0.5	2.3	<0.5	6.8	0.5	5.9	6.5	1.3	11	18	24	15

Pyrethroids

Event	CR-1R	CR-39	CR-39R	CR-41	CR-41R	CR-42	CR-46	CR-46R	NE-RAIN	NW-RAIN	SC-1 RAIN
Allethrin (ng/L)											
DW27	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-
DW28	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-
DW29	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-
DW30	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	-	-
SE61	-	<0.5	<0.5	<2	<0.1	<1	<0.5	<0.5	<0.1	<0.5	<0.1
SE62	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SE64	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bifenthrin (ng/L)											
DW27	-	0.4	<0.1	0.5	<0.1	1.3	2	<0.1	-	-	-
DW28	-	0.3	<0.1	0.9	<0.1	0.9	0.3	0.2	-	-	-
DW29	<0.1	<0.1	<0.1	0.5	<0.1	0.9	0.6	<0.1	-	-	-
DW30	<0.1	<0.1	<0.1	<0.1	<0.1	1.2	2.4	<0.1	-	-	-
SE61	-	220	22	72	<0.1	25	6.7	11	2.7	2.3	1.3
SE62	0.3	15	1.1	33	1.8	14	20	0.7	0.4	0.3	0.5
SE64	<0.1	11	0.4	6.8	0.5	13	9.5	3.1	2.8	1.6	1.6
Cyfluthrin (ng/L)											
DW27	-	<0.2	<0.2	<0.2	<0.2	0.9	<0.2	<0.2	-	-	-
DW28	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW29	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW30	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
SE61	-	<1	<1	<4	<0.2	4.5	1.5	2.3	<0.2	<1	<0.2
SE62	<0.2	0.3	<0.2	1.9	0.2	1.7	1.2	<0.2	<0.2	<0.2	<0.2
SE64	<0.2	0.9	<0.2	0.6	<0.2	1.5	0.9	1300	<0.2	<0.2	0.3

Event	CR-1R	CR-39	CR-39R	CR-41	CR-41R	CR-42	CR-46	CR-46R	NE-RAIN	NW-RAIN	SC-1 RAIN
Cypermethrin (ng/L)											
DW27	-	<0.2	<0.2	<0.2	<0.2	2.2	0.4	<0.2	-	-	-
DW28	-	<0.2	<0.2	<0.2	<0.2	13	<0.2	<0.2	-	-	-
DW29	<0.2	<0.2	<0.2	<0.2	<0.2	1.7	0.2	<0.2	-	-	-
DW30	<0.2	<0.2	0.3	<0.2	<0.2	3.3	0.8	<0.2	-	-	-
SE61	-	19	2	9.8	<0.2	14	2.7	5.6	0.3	<1	0.8
SE62	<0.2	0.6	<0.2	9.3	0.8	8.2	3.3	0.2	<0.2	<0.2	<0.2
SE64	<0.2	0.6	0.2	3.1	<0.2	3.1	1.9	<0.2	0.5	<0.2	0.2
Deltamethrin:Tralomethrin (ng/L)											
DW27	-	<0.2	<0.2	<0.2	<0.2	<0.2	0.8	<0.2	-	-	-
DW28	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW29	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW30	<0.2	<0.2	<0.2	<0.2	0.5	0.9	<0.2	3.4	-	-	-
SE61	-	<1	<1	16	<0.2	49	<1	19	1.6	<1	3.8
SE62	<0.2	1.4	<0.2	58	2.2	4.3	6.3	1.4	<0.2	<0.2	<0.2
SE64	<0.2	2.4	<0.2	2.3	<0.2	3.4	1.8	4.7	<0.2	<0.2	<0.2
Esfenvalerate:Fenvalerate (ng/L)											
DW27	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW28	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW29	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW30	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
SE61	-	<1	<1	<4	<0.2	<2	<1	<1	<0.2	<1	<0.2
SE62	<0.2	1.8	<0.2	4.5	0.5	3.1	4.6	0.2	0.6	0.2	0.9
SE64	<0.2	<0.2	<0.2	<0.4	<0.2	0.4	0.3	<0.2	<0.2	<0.2	<0.2

Event	CR-1R	CR-39	CR-39R	CR-41	CR-41R	CR-42	CR-46	CR-46R	NE-RAIN	NW-RAIN	SC-1 RAIN
Fenpropathrin (ng/L)											
DW27	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW28	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW29	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW30	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
SE61	-	<1	<1	<4	<0.2	<2	<1	<1	1.1	<1	0.3
SE62	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SE64	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Lambda-Cyhalothrin (ng/L)											
DW27	-	<0.2	<0.2	<0.2	<0.2	92	<0.2	<0.2	-	-	-
DW28	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW29	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW30	0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.5	<0.2	-	-	-
SE61	-	<1	<1	<4	<0.2	<2	<1	<1	0.4	<1	<0.2
SE62	<0.2	0.6	<0.2	1.1	<0.2	1	1.2	<0.2	<0.2	<0.2	<0.2
SE64	0.7	0.7	<0.2	1.4	<0.2	1	0.8	0.4	12	0.7	0.6
Permethrin (ng/L)											
DW27	-	<2	<2	<2	<2	<2	<2	<2	-	-	-
DW28	-	<2	<2	<2	<2	5.5	<2	<2	-	-	-
DW29	<2	<2	<2	<2	<2	<2	<2	<2	-	-	-
DW30	<2	<2	<2	<2	<2	<2	<2	<2	-	-	-
SE61	-	<10	<10	<40	<2	<20	<10	<10	3.2	<10	<2
SE62	<2	5.4	<2	8.6	<2	19	5.6	<2	<2	<2	<2
SE64	<2	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2

Event	CR-1R	CR-39	CR-39R	CR-41	CR-41R	CR-42	CR-46	CR-46R	NE-RAIN	NW-RAIN	SC-1 RAIN
Tau-Fluvalinate (ng/L)											
DW27	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW28	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW29	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW30	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
SE61	-	<1	<1	<4	<0.2	<2	<1	<1	<0.2	<1	<0.2
SE62	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SE64	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Tetramethrin (ng/L)											
DW27	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW28	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW29	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
DW30	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
SE61	-	<1	<1	<4	<0.2	<2	<1	<1	<0.2	<1	<0.2
SE62	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SE64	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

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Appendix D
2016-2017 Sediment Toxicity Results

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Sediment Toxicity Lab Report
October 17, 2016 at CR-46R
After Storm Event

Micheline Kipf
Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

November 22, 2016

Dear Micheline:

I have enclosed a copy of our report "An Evaluation of the Toxicity of City of Stockton Stormwater Program Sediment Samples" for the samples that were collected October 17, 2016. The results of this testing are summarized below:

Summary of Stockton Stormwater Program sediment effects on *Hyalella azteca*.		
Sample Station	Toxicity Present Relative to Lab Control?	
	Survival	Growth
CR-46RPP	**YES**	**YES**
FD	**YES**	**YES**

If you have any questions regarding the performance and interpretation of this testing, please contact my colleague Michael McElroy or myself at (707) 207-7760.

Sincerely,

Stephen L. Clark
Vice President/Special Projects Director

An Evaluation of the Toxicity of City of Stockton Stormwater Program Sediment Samples

Samples collected October 17, 2016

Prepared For:

Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

Prepared By:

Pacific EcoRisk
2250 Cordelia Rd.
Fairfield, CA 94534
(707) 207-7760

November 2016

PACIFIC ECORISK
ENVIRONMENTAL CONSULTING & TESTING

An Evaluation of the Toxicity of City of Stockton Stormwater Program Sediment Samples

Samples collected October 17, 2016

Table of Contents

Appendices

1. INTRODUCTION

In compliance with the City of Stockton Stormwater Program NPDES permit monitoring requirements, Condor Earth Technologies, Inc., has contracted Pacific EcoRisk (PER) to perform evaluations of the toxicity of selected ambient water and sediment samples. The current testing event was designed to meet the sediment monitoring requirements using sediment samples that were collected on October 17, 2016. This evaluation consisted of performing the US EPA 10-day survival and growth test with the amphipod *Hyalella azteca*. This report describes the performance and results of this testing.

2. SEDIMENT TOXICITY TEST PROCEDURES

This testing followed the guidelines established by the EPA manual "Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition" (EPA/600/R-99/064).

2.1 Receipt and Handling of the Sediment Samples

On October 17, two sediment samples were collected into appropriately cleaned sample containers. These samples were transported on ice and under chain-of-custody, to the PER laboratory in Fairfield, CA (Table 1). The samples were then stored at ≤6˚C until being used to initiate toxicity tests within 14 days of collection. The chain-of-custody record for the collection and delivery of these samples is presented in Appendix A.

Table 1. Sampling stations and date of sediment collection for the Stockton Stormwater Program monitoring.

Sample Station	Date Collected	Date Received
CR-46RPP	10/17/16	10/18/16
FD*	10/17/16	10/18/16

* - Field Duplicate sample.

2.2 Solid-Phase Sediment Toxicity Testing with *Hyalella azteca*

The sediment toxicity test with *H. azteca* consists of exposing the amphipods to the sediment for 10 days, after which effects on survival and growth are evaluated. The specific procedures used in this testing are described below.

The *H. azteca* used in this testing were obtained from a commercial supplier (Chesapeake Cultures Inc, Hayes, VA). Upon receipt at the laboratory, the amphipods were maintained in tanks containing Lab Water Control medium at 23˚C, and were fed a commercial Yeast-Cerophyll®-Trout chow (YCT) food amended with freeze-dried *Spirulina*.

The Control treatment sediment for this testing consisted of a composite of reference site sediments that have been maintained under culture at the PER lab for >3 months. The sediment samples were each tested at the 100% concentration only. There were eight replicates for each test treatment, each replicate container consisting of a 300-mL tall-form glass beaker with a 3-cm ribbon of 540 µm mesh NITEX attached to the top of the beaker with silicone sealant. Each sediment sample was homogenized prior to loading of sediment into the test replicates. For each sediment, approximately 100 mL of sediment was then loaded into each of the test replicate containers. Each test replicate was then carefully filled with clean Lab Water Control medium (= Standard Artificial Medium [SAM-5S] water [Borgmann 1996]). The test replicates with sediments and clean overlying water were established ~24 hrs prior to the introduction of the amphipods, and were placed in a temperature-controlled room at 23˚C during this pre-test period.

After this initial 24 hr period, the overlying water in each replicate was flushed with one volume (approximately 150 mL) of fresh overlying water. For each test treatment, a small aliquot of the renewed overlying water was then collected from each of the eight replicates and composited for measurement of "initial" water quality characteristics (pH, dissolved oxygen [D.O.], conductivity, alkalinity, hardness, and total ammonia). The testing was then initiated with the random allocation of ten 11 day-old amphipods into each replicate, followed by the addition of 1.0 mL of *Spirulina*-amended YCT food. The test replicates were then placed in a temperature-controlled room at 23˚C. At the time of test initiation, eight replicates of 10 randomly-selected organisms were collected, dried, and weighed (described below) to determine the mean dry weight of the test organisms at test initiation (T_0).

Each day, for the following nine days, each test replicate was examined and any dead amphipods were removed via pipette and the mortality recorded. A small aliquot of the overlying water in each of the eight replicates for each test treatment was then collected and composited as before for measurement of "old" D.O., after which each replicate was flushed with one volume of fresh water. Another small aliquot of the overlying water in each of the eight replicates was then collected and composited as before for measurement of "new" D.O., after which each replicate was fed 1.0 mL of *Spirulina*-amended YCT.

After 10 days exposure, testing was terminated. An aliquot of overlying water was collected from each replicate and composited for analysis of the "final" water quality characteristics. The sediments in each replicate container were then carefully sorted and sieved and the number of surviving amphipods determined. The surviving organisms were euthanized in methanol, rinsed in de-ionized water, and transferred to small pre-tared weighing pans, which were placed into a drying oven at 100˚C. After drying for ~24 hrs, the pans were transferred to a desiccator to cool, and then weighed to the nearest 0.01 mg to determine the mean dry weight per surviving organism for each replicate. The resulting survival and growth (mean dry weight) data were then analyzed to evaluate any impairment due to the sediments; all statistical analyses were performed using the CETIS® statistical software (TidePool Scientific, McKinleyville, CA).

3. RESULTS

3.1 Effects of the Stockton Stormwater Program Sediments on *Hyalella azteca*

The results of this testing are summarized below in Table 2. There were significant reductions in survival and growth in each of the sediment samples. The test data and summary of statistical analyses for this testing are presented in Appendix B.

Table 2. Data summary for the Stockton Stormwater Program sediment samples.

Test Treatment	% Survival	% of Control	Toxic? (Y/N)	Mean dry weight (mg)	% of Control	Toxic? (Y/N)
Control	96.3	N/A	N/A	0.23	N/A	N/A
CR-46RPP	**38.8***	40.3	**Y**	**0.18***	77.8	**Y**
FD	**47.5***	49.4	**Y**	**0.13***	55.8	**Y**

* The response at this test treatment was significantly less than the Control sediment response (at $p<0.05$).

4. SUMMARY AND CONCLUSIONS

The results of this testing are summarized below. There were significant reductions in survival and growth in the CR-46RPP and FD sediment samples.

Summary of Stockton Stormwater Program sediment effects on *Hyalella azteca*.		
Sample Station	Toxicity Present Relative to Lab Control?	
	Survival	Growth
CR-46RPP	**YES**	**YES**
FD	**YES**	**YES**

4.1 QA/QC Summary

Test Conditions – All test conditions (pH, D.O., temperature, etc.) were within acceptable limits. All analyses were performed according to laboratory Standard Operating Procedures.

Negative Control – The biological responses for the test organisms at the Lab Control treatment were within acceptable limits.

Appendix A

Chain-of-Custody Record for the Collection and Delivery of the Stockton Stormwater Program Sediment Samples

CHAIN-OF-CUSTODY

16947

Sample Results TAT: ☐ Rush ☒ Standard 10 Day (discount)

Condor Earth Technologies, Inc.

☐ P.O. Box 3905/21663 Brian Lane, Sonora, CA 95370, 209.532.0361, 209.532.0773 (fax), condor.sonora@condorearth.com

☒ 188 Frank West Circle, Suite I, Stockton, CA 95206, 209.234.0518, 209.234.0538 (fax), condor.stockton@condorearth.com

☐ 1739 Ashby Road, Suite B, Merced, CA 95348, 209.388.9601, 209.388.1778 (fax), condor.merced@condorearth.com

SHIPPED TO:

Pacific Eco Risk (707)207-7760

2250 Cordelia Rd, Fairfield CA 94534

SEND RESULTS TO:

NAME: Micheline Kipf

E-MAIL: mkipf@condorearth.com

☑ PLEASE E-MAIL (preferred) / OR FAX RESULTS TO ADDRESS MARKED ABOVE

PROJECT NAME/LOCATION: COS ORGAN DISCHARGE

EDF RESULTS REQUIRED YES (NO)

SITE GLOBAL ID:

PROJECT NO.: 60665-04-01

SAMPLED BY: (Signature)

Date	Time	Sample Site Name	Sample ID (if different)	Matrix	# of containers	Preservatives (see below)	ANALYSIS/METHOD: Field Filtered	Hyalella azteca *	TOC	Grain Size	REMARKS	LAB ID #
10/17/16	1055	CR-46RPP		S	2	1	N	X	X	X	*chronic freshwater (EPA 600/4-91/003) Hyalella azteca survival and growth	
10/17/16	1115	FD		S	2	1	N	X	X	X		
											Conduct additional pyrethroids analysis if toxicity is observed	
											Subsamples to be collected for Caltest	
											TOC RL = 1 mg/L	

Relinquished By: (Signature)	Date:	Time:	Received By: (Signature)	Date:	Time:
	10/17/16	1445	Rebecca Savage	10/17/16	1445
Rebecca Savage	10/18/16	1010	Trevor Fisher	10/18/16	1010

Matrix: DW Drinking Water; WW Waste Water; HWW Hazardous Waste (Water); S Soil/Solid; SW Storm Water; GW Groundwater

Preservative: 1 4°C; 2 HCL; 3 NaOH; 4 $Na_2S_2O_3$; 5 HNO_3; 6 H_2SO_4; 7 Other _____

Original - Send | Yellow - File | Pink - Log Book

Appendix B

Test Data and Summary of Statistics for the Evaluation of the Toxicity of the Stockton Stormwater Program Sediment Samples to *Hyalella azteca*

CETIS Summary Report

Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Batch ID:	00-6670-9539	**Test Type:**	Survival-Growth (10 day)	**Analyst:**	Simin Delijani
Start Date:	22 Oct-16 14:25	**Protocol:**	EPA/600/R-99/064 (2000)	**Diluent:**	Not Applicable
Ending Date:	01 Nov-16 13:33	**Species:**	Hyalella azteca	**Brine:**	Not Applicable
Duration:	9d 23h	**Source:**	Chesapeake Cultures, Inc.	**Age:**	11

Sample Code	Sample ID	Sample Date	Receive Date	Sample Age	Client Name	Project
CE_1016HA_C1	10-3668-4358	22 Oct-16 14:25	22 Oct-16 14:25	NA (22.2 °C)	Condor Earth Technologies	26442
CR-46RPP	10-1807-4609	17 Oct-16 10:55	18 Oct-16 10:10	5d 4h (3.1 °C)		
Field Duplicate	03-6588-2200	17 Oct-16 11:15	18 Oct-16 10:10	5d 3h (0.1 °C)		

Sample Code	Material Type	Sample Source	Station Location	Latitude	Longitude
CE_1016HA_C1	Control Sediment	Condor Earth Technologies	LABQA		
CR-46RPP	Freshwater Sedimen	Condor Earth Technologies	CR-46RPP		
Field Duplicate	Freshwater Sedimen	Condor Earth Technologies	FD		

Mean Dry Weight-mg Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_1016HA_C1	8	0.231	0.223	0.239	0.21	0.242	0.00349	0.00987	4.27%	0.0%
CR-46RPP	8	0.18	-0.11	0.469	0.044	1.03	0.122	0.346	193.0%	22.2%
Field Duplicate	8	0.129	0.0586	0.199	0.0489	0.27	0.0297	0.0841	65.2%	44.2%

Survival Rate Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_1016HA_C1	8	0.963	0.9	1	0.8	1	0.0263	0.0744	7.73%	0.0%
CR-46RPP	8	0.388	0.23	0.545	0.1	0.7	0.0666	0.189	48.6%	59.7%
Field Duplicate	8	0.475	0.176	0.774	0.1	0.9	0.126	0.358	75.3%	50.6%

Mean Dry Weight-mg Detail

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CE_1016HA_C1	0.21	0.239	0.236	0.242	0.233	0.226	0.233	0.229
CR-46RPP	0.055	0.0575	0.044	0.0443	0.0533	0.048	0.1	1.03
Field Duplicate	0.0489	0.0662	0.0688	0.27	0.163	0.23	0.0643	0.12

Survival Rate Detail

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CE_1016HA_C1	1	1	0.9	1	1	0.8	1	1
CR-46RPP	0.4	0.4	0.5	0.7	0.3	0.5	0.1	0.2
Field Duplicate	0.9	0.8	0.8	0.1	0.3	0.1	0.7	0.1

Survival Rate Binomials

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CE_1016HA_C1	10/10	10/10	9/10	10/10	10/10	8/10	10/10	10/10
CR-46RPP	4/10	4/10	5/10	7/10	3/10	5/10	1/10	2/10
Field Duplicate	9/10	8/10	8/10	1/10	3/10	1/10	7/10	1/10

Hyalella 10-d Survival and Growth Sediment Test — Pacific EcoRisk

Analysis ID:	18-5164-5652	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv1.8.7
Analyzed:	03 Nov-16 10:25	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Angular (Corrected)	NA	C > T	NA	NA	9.34%	

Equal Variance t Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
CE_1016HA_C1		CR-46RPP	8.25	1.76	0.148	14	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.912593	1.912593	1	68	<0.0001	Significant Effect
Error	0.3938716	0.02813368	14			
Total	2.306465		15			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	3.27	8.89	0.1403	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.911	0.841	0.1191	Normal Distribution

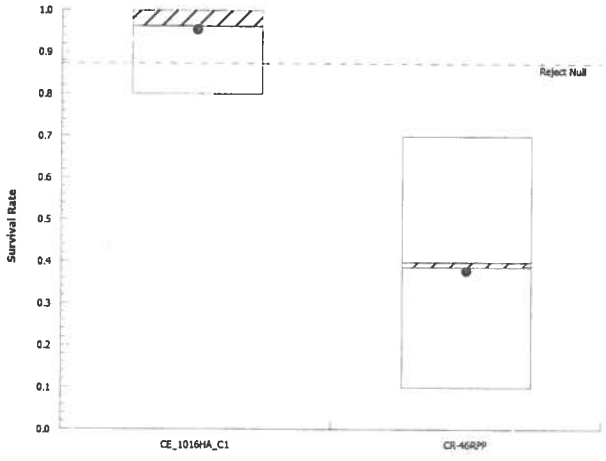
Survival Rate Summary

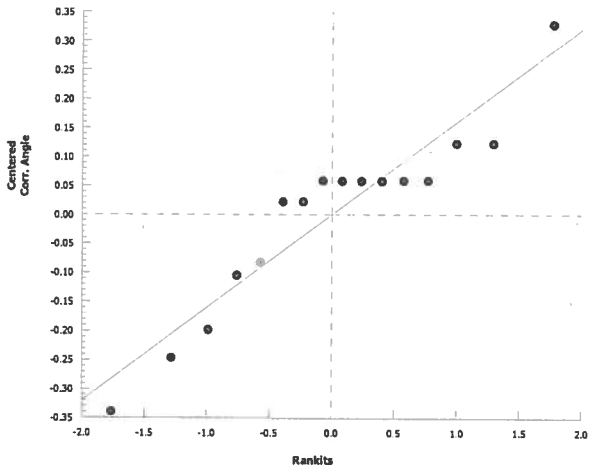
Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016HA_C1	8	0.962	0.9	1	1	0.8	1	0.0263	7.73%	0.0%
CR-46RPP	8	0.388	0.23	0.545	0.4	0.1	0.7	0.0666	48.6%	59.7%

Angular (Corrected) Transformed Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016HA_C1	8	1.35	1.26	1.45	1.41	1.11	1.41	0.0406	8.48%	0.0%
CR-46RPP	8	0.662	0.488	0.836	0.685	0.322	0.991	0.0734	31.4%	51.1%

Graphics





Hyalella 10-d Survival and Growth Sediment Test — Pacific EcoRisk

Analysis ID:	00-8900-2725	**Endpoint:**	Mean Dry Weight-mg	**CETIS Version:**	CETISv1.8.7
Analyzed:	03 Nov-16 10:25	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Untransformed	NA	C > T	NA	NA	93.3%	

Wilcoxon Rank Sum Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
CE_1016HA_C1		CR-46RPP	44	NA	0	14	0.0052	Exact	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.01054155	0.01054155	1	0.176	0.6813	Non-Significant Effect
Error	0.8391194	0.0599371	14			
Total	0.849661		15			

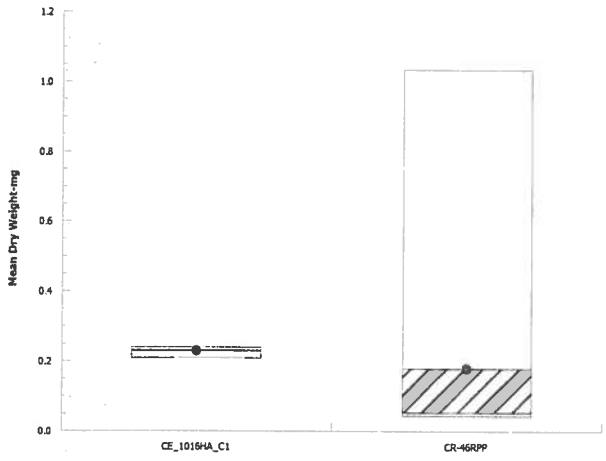
Distributional Tests

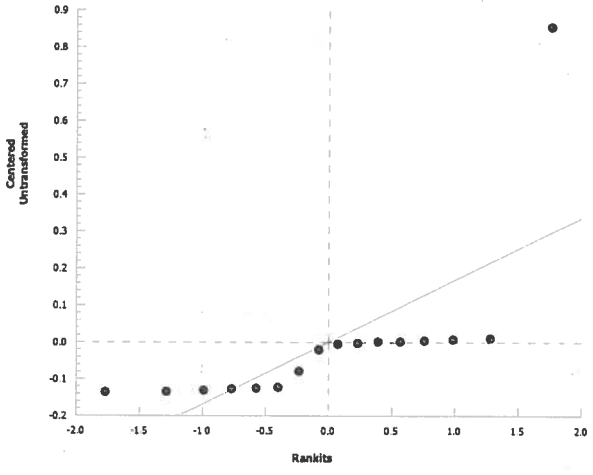
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	1230	8.89	<0.0001	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.497	0.841	<0.0001	Non-normal Distribution

Mean Dry Weight-mg Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016HA_C1	8	0.231	0.223	0.239	0.233	0.21	0.242	0.00349	4.27%	0.0%
CR-46RPP	8	0.18	-0.11	0.469	0.0542	0.044	1.03	0.122	193.0%	22.2%

Graphics





10-Day *Hyalella azteca* Sediment Toxicity Test Data

Client: Condor Earth: Stockton Stormwater Project#: 26442 Organism Log #: 9864 Age: 11d

Species: *Hyalella azteca* Test ID#: 70087, 88 Organism Supplier: Chesapeake Cultures

Day	Date	Test Material: Control	Water Quality Measurements			Sign-off:
			Parameter	Value	Meter ID	
0	10/22/16	# Live Organisms: A 10, B 10, C 10, D 10, E 10, F 10, G 10, H 10	pH	7.73	PH19	AM Change: JAM
			D.O. (mg/L)	8.1	RD10	WQ: JAM
			Conductivity (µS/cm)	490	EC09	Initiation Time: 1405
			Alkalinity (mg/L)	✓ 65.2		Initiation Counts: BV
			Hardness (mg/L)	✓ 129		Confirmation Counts: ✓ BV
			Ammonia (mg/L)	<1.00	DR3800	PM Feed: BV
			Temp. (°C)	22.2	48A	
1	10/23/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.0	RD11	AM Change: TA WQ: TA
			New D.O. (mg/L)	7.1	RD11	Mortality Counts: TA
			Temp. (°C)	22.8	48A	PM Change: DJ PM Feed: DJ
2	10/24/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.0	RD10	AM Change: HR WQ: HR
			New D.O. (mg/L)	6.6	RD10	Mortality Counts: HR
			Temp. (°C)	23.3	48A	PM Change: HR PM Feed: HR
3	10/25/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.3	RD10	AM Change: RB WQ: RB
			New D.O. (mg/L)	7.4	RD10	Mortality Counts: RB
			Temp. (°C)	23.2	48A	PM Change: RB PM Feed: RB
4	10/26/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.3	RD10	AM Change: RB WQ: RB
			New D.O. (mg/L)	8.4	RD10	Mortality Counts: RB
			Temp. (°C)	23.4	48A	PM Change: RB PM Feed: RB
5	10/27/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.3	RD09	AM Change: JJ WQ: JJ
			New D.O. (mg/L)	8.4	RD09	Mortality Counts: JJ
			Temp. (°C)	23.4	48A	PM Change: JJ PM Feed: JJ
6	10/28/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.5	RD09	AM Change: JAM WQ: JAM
			New D.O. (mg/L)	8.7	RD09	Mortality Counts: JAM
			Temp. (°C)	23.5	48A	PM Change: JAM PM Feed: JAM
7	10/29/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.4	RD09	AM Change: RB WQ: RB
			New D.O. (mg/L)	8.6	RD09	Mortality Counts: RB
			Temp. (°C)	23.6	48A	PM Change: RB PM Feed: RB
8	10/30/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.6	RD10	AM Change: QZ WQ: QZ
			New D.O. (mg/L)	8.7	RD10	Mortality Counts: QZ
			Temp. (°C)	23.8 23.7	48A	PM Change: QZ PM Feed: QZ
9	10/31/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.4	RD09	AM Change: HR WQ: HR
			New D.O. (mg/L)	8.5	RD09	Mortality Counts: HR
			Temp. (°C)	23.8	48A	PM Change: HR PM Feed: HR
10	11/1/16	# Alive: A 10, B 10, C 9, D 10, E 10, F 8, G 10, H 10	pH	7.64	PH15	WQ: JAM
			D.O. (mg/L)	8.4	RD09	Termination Counts: WC
			Conductivity (µS/cm)	464	EC11	Termination Time: 1335
			Alkalinity (mg/L)	✓ 66.8		
			Hardness (mg/L)	✓ 126		
			Ammonia (mg/L)	<1.00	DR3800	
			Temp. (°C)	23.7	48A	

10-Day *Hyalella azteca* Sediment Toxicity Test Data

Client: Condor Earth: Stockton Stormwater Project#: 26442 Organism Log #: 9864 Age: 11d

Species: *Hyalella azteca* Test ID#: 70087 Organism Supplier: Chesapeake Cultures

Day	Date	Test Material: CR-46RPP	Water Quality Parameter	Value	Meter ID	Sign-off:
0	10/22/16	# Live Organisms: A 10, B 10, C 10, D 10, E 10, F 10, G 10, H 10	pH	7.64	PH19	AM Change: JAM
			D.O. (mg/L)	8.0	RD10	WQ: JAM
			Conductivity (µS/cm)	425	EC09	Initiation Time: 1425
			Alkalinity (mg/L)	~~38.8~~ ✓ 65.2		Initiation Counts: BV
			Hardness (mg/L)	✓ 127		Confirmation Counts:
			Ammonia (mg/L)	<1.00	DR3800	PM Feed: BV
			Temp. (°C)	22.2	48A	
1	10/23/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	4.0	RD11	AM Change: TA WQ: TA
			New D.O. (mg/L)	7.0	RD11	Mortality Counts: TA
			Temp. (°C)	22.8	48A	PM Change: DS PM Feed: DS
2	10/24/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	4.6	RD10	AM Change: HR WQ: HR
			New D.O. (mg/L)	7.0	RD10	Mortality Counts: HR
			Temp. (°C)	23.3	48A	PM Change: HR PM Feed: HR
3	10/25/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	4.7	RD10	AM Change: RB WQ: RB
			New D.O. (mg/L)	7.0	RD10	Mortality Counts: RB
			Temp. (°C)	23.2	48A	PM Change: RB PM Feed: RB
4	10/26/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.4	RD10	AM Change: RB WQ: RB
			New D.O. (mg/L)	8.3	RD10	Mortality Counts: RB
			Temp. (°C)	23.4	48A	PM Change: RB PM Feed: RB
5	10/27/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.4	RD09	AM Change: JJ WQ: JJ
			New D.O. (mg/L)	8.4	RD09	Mortality Counts: JJ
			Temp. (°C)	23.4	48A	PM Change: JJ PM Feed: JJ
6	10/28/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.6	RD09	AM Change: JAM WQ: JAM
			New D.O. (mg/L)	8.6	RD09	Mortality Counts: JAM
			Temp. (°C)	23.5	48A	PM Change: JAM PM Feed: JAM
7	10/29/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.5	RD09	AM Change: RB WQ: RB
			New D.O. (mg/L)	8.6	RD09	Mortality Counts: RB
			Temp. (°C)	23.6	48A	PM Change: RB PM Feed: RB
8	10/30/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.6	RD10	AM Change: JR WQ: JR
			New D.O. (mg/L)	8.7	RD10	Mortality Counts: JR
			Temp. (°C)	23.7	48A	PM Change: JR PM Feed: JR
9	10/31/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	7.8	RD09	AM Change: HR WQ: HR
			New D.O. (mg/L)	7.7	RD09	Mortality Counts: HR
			Temp. (°C)	23.8	48A	PM Change: HR PM Feed: HR
10	11/1/16	# Alive: A ~~3~~ 4, B 4, C 5, D 7, E 3, F 5, G 1, H 2	pH	7.58	PH15	WQ: SAM
			D.O. (mg/L)	7.6	RD09	Termination Counts: WC
			Conductivity (µS/cm)	470	EC11	Termination Time: 1335
			Alkalinity (mg/L)	✓ 75.6		
			Hardness (mg/L)	✓ 147		
			Ammonia (mg/L)	1.70	DR3800	
			Temp. (°C)	23.7	48A	

Hyalella azteca Weight Data Sheets

Client: **Condor Earth: Stockton Stormwater** Project #: **26442** Balance ID: Bal 04

Sample ID: **CR-46RPP** Tare Wt Date: 10/23/16 Sign-Off: DS

Test ID #: **70087** Final Wt Date: 11/2/16 Sign-Off: JP

Pan	Concentration	Replicate	Initial Weight. (mg)	Final Weight. (mg)	# organisms	Ave Weight (mg)
1	Control	A	69.21	71.31	10	0.210
2	Sediment	B	62.36	64.75	10	0.239
3		C	70.82	72.94	11/3 ~~10~~ 9	0.212
4		D	63.63	66.05	10	0.242
5		E	64.32	66.65	10	0.233
6		F	66.48	68.29	11/3 ~~10~~ 8	0.181
7		G	70.73	73.06	10	0.233
8		H	67.56	69.85	10	0.229
9	100%	A	65.44	65.66	11/3 ~~10~~ 4	0.022
10	CR-46RPP	B	62.50	62.73	11/3 ~~10~~ 4	0.023
11		C	68.14	68.36	11/3 ~~10~~ 5	0.022
12		D	75.87	76.18	11/3 ~~10~~ 7	0.031
13		E	61.02	61.18	11/3 ~~10~~ 3	0.016
14		F	82.57	82.81	11/3 ~~10~~ 5	0.024
15		G	66.48	66.58	11/3 ~~10~~ 1	0.010
16		H	64.81	66.88	11/3 ~~10~~ 2	0.207
QA1			65.83	65.83		

Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Analysis ID:	05-2368-3398	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv1.8.7
Analyzed:	03 Nov-16 10:25	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Angular (Corrected)	NA	C > T	NA	NA	19.4%	

Unequal Variance t Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
CE_1016HA_C1		Field Duplicate	4.07	1.86	0.276	8	0.0018	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.457392	1.457392	1	16.5	0.0012	Significant Effect
Error	1.233673	0.08811953	14			
Total	2.691066		15			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	12.4	8.89	0.0037	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.927	0.841	0.2149	Normal Distribution

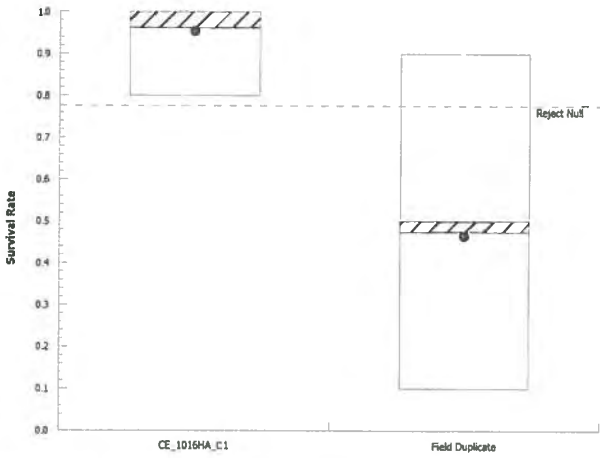
Survival Rate Summary

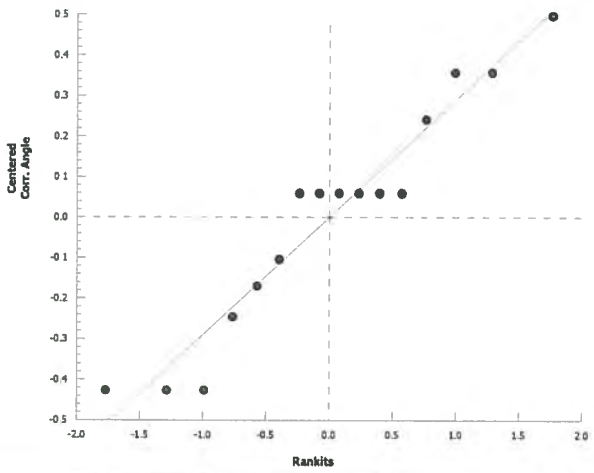
Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016HA_C1	8	0.962	0.9	1	1	0.8	1	0.0263	7.73%	0.0%
Field Duplicate	8	0.475	0.176	0.774	0.5	0.1	0.9	0.126	75.3%	50.6%

Angular (Corrected) Transformed Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016HA_C1	8	1.35	1.26	1.45	1.41	1.11	1.41	0.0406	8.48%	0.0%
Field Duplicate	8	0.75	0.412	1.09	0.785	0.322	1.25	0.143	53.8%	44.6%

Graphics





Hyalella 10-d Survival and Growth Sediment Test — Pacific EcoRisk

Analysis ID:	12-8582-3513	**Endpoint:**	Mean Dry Weight-mg	**CETIS Version:**	CETISv1.8.7
Analyzed:	03 Nov-16 10:25	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Untransformed	NA	C > T	NA	NA	24.6%	

Unequal Variance t Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
CE_1016HA_C1		Field Duplicate	3.41	1.89	0.057	7	0.0057	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.04164698	0.04164698	1	11.6	0.0042	Significant Effect
Error	0.05019464	0.003585331	14			
Total	0.09184162		15			

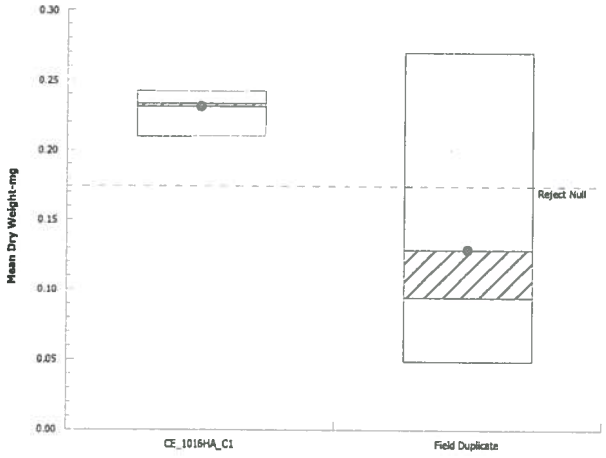
Distributional Tests

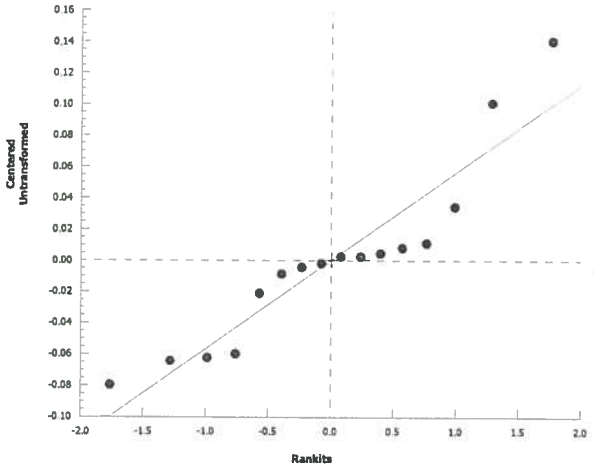
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	72.7	8.89	<0.0001	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.884	0.841	0.0447	Normal Distribution

Mean Dry Weight-mg Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016HA_C1	8	0.231	0.223	0.239	0.233	0.21	0.242	0.00349	4.27%	0.0%
Field Duplicate	8	0.129	0.0586	0.199	0.0944	0.0489	0.27	0.0297	65.2%	44.2%

Graphics





10-Day *Hyalella azteca* Sediment Toxicity Test Data

Client: Condor Earth: Stockton Stormwater Project#: 26442 Organism Log #: 9864 Age: 11d

Species: *Hyalella azteca* Test ID#: 70088 Organism Supplier: Chesapeake Cultures

Day	Date	Test Material: FD	Parameter	Value	Meter ID	Sign-off:
0	10/22/16	# Live Organisms: A 10, B 10, C 10, D 10, E 10, F 10, G 10, H 10	pH	7.60	PH19	AM Change: JAM
			D.O. (mg/L)	8.1	RD10	WQ: JAM
			Conductivity (µS/cm)	418	EC04	Initiation Time: 1425
			Alkalinity (mg/L)	✓ 57.6		Initiation Counts: BV
			Hardness (mg/L)	✓ 125		Confirmation Counts:
			Ammonia (mg/L)	<1.00	DR3800	PM Feed: BV
			Temp. (°C)	22.2	48A	
1	10/23/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	4.9	RD11	AM Change: TA WQ: TA
			New D.O. (mg/L)	7.3	RD11	Mortality Counts: TA
			Temp. (°C)	22.8	48A	PM Change: DJ PM Feed: DJ
2	10/24/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	5.5	RD10	AM Change: HR WQ: HR
			New D.O. (mg/L)	7.3	RD10	Mortality Counts: HR
			Temp. (°C)	23.3	48A	PM Change: HR PM Feed: HR
3	10/25/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	5.1	RD10	AM Change: RB WQ: RB
			New D.O. (mg/L)	6.9	RD10	Mortality Counts: RB
			Temp. (°C)	23.2	48A	PM Change: RB PM Feed: RB
4	10/26/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.3	RD10	AM Change: RB WQ: RB
			New D.O. (mg/L)	8.2	RD10	Mortality Counts: RB
			Temp. (°C)	23.4	48A	PM Change: RB PM Feed: RB
5	10/27/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.3	RD09	AM Change: JF WQ: JF
			New D.O. (mg/L)	8.4	RD09	Mortality Counts: JF
			Temp. (°C)	23.4	48A	PM Change: JF PM Feed: JF
6	10/28/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.6	RD09	AM Change: JAM WQ: JAM
			New D.O. (mg/L)	8.6	RD09	Mortality Counts: JAM
			Temp. (°C)	23.5	48A	PM Change: JAM PM Feed: JAM
7	10/29/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	8.4	RD09	AM Change: RB WQ: RB
			New D.O. (mg/L)	8.7	RD09	Mortality Counts: RB
			Temp. (°C)	23.6	48A	PM Change: RB PM Feed: RB
8	10/30/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	~~8.6~~ 8.4	RD10	AM Change: JR WQ: JR
			New D.O. (mg/L)	8.6	RD10	Mortality Counts: JR
			Temp. (°C)	23.7	48A	PM Change: JR PM Feed: JR
9	10/31/16	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	~~7.8~~ 10/31/16	RD09	AM Change: HR WQ: HR
			New D.O. (mg/L)	~~7.7~~ 10/31/16	RD09	Mortality Counts: HR
			Temp. (°C)	23.8	48A	PM Change: HR PM Feed: HR
10	11/1/16	# Alive: A 9, B 8, C 8, D 1, E 3, F 1, G 7, H 1	pH	7.58	PH15	WQ: JAM
			D.O. (mg/L)	7.9	RD09	Termination Counts: SF
			Conductivity (µS/cm)	450	EC11	Termination Time: 1335
			Alkalinity (mg/L)	✓ 73.2		
			Hardness (mg/L)	✓ 141		
			Ammonia (mg/L)	<1.00	DR3800	
			Temp. (°C)	23.7	48A	

Hyalella azteca Weight Data Sheets

Client: **Condor Earth: Stockton Stormwater** Project #: **26442** Balance ID: Bal04

Sample ID: **FD** Tare Wt Date: 10/23/16 Sign-Off: DT

Test ID #: **70088** Final Wt Date: 11/2/16 Sign-Off: QA

Pan	Concentration	Replicate	Initial Weight. (mg)	Final Weight. (mg)	# organisms	Ave Weight (mg)
1	Control	A	69.21	71.31	10	0.210
2	Sediment	B	62.36	64.75	10	0.239
3		C	70.82	72.94	11/3 to 9	0.212
4		D	63.63	66.05	10	0.242
5		E	64.32	66.65	10	0.233
6		F	66.48	68.29	11/3 to 8	0.181
7		G	70.73	73.06	10	0.233
8		H	67.56	69.85	10	0.229
17	100%	A	67.23	67.67	11/3 to 9	0.044
18	FD	B	59.93	60.46	11/3 to 8	0.053
19		C	70.42	70.97	11/3 to 8	0.055
20		D	68.91	69.18	11/3 to 1	0.027
21		E	69.25	69.74	11/3 to 3	0.049
22		F	71.41	71.64	11/3 to 1	0.023
23		G	68.48	68.93	11/3 to 7	0.045
24		H	58.37	58.49	11/3 to 1	0.012
QA1			65.83	65.83		

Hyalella azteca Weight Data Sheets

Client: **Condor Earth: Stockton Stormwater** Test Init Date: 10/22/16 Balance ID: Bal04

Sample ID: **T0** Tare Wt Date: 10/22/16 Sign-Off: DT

Test ID: 70087, 88 Final Wt Date: 10/27/16 Sign-Off: JM

Project #: 26442

Pan	Concentration / Replicate	Initial Weight. (mg)	Final Weight. (mg)	# organisms	Ave Weight (mg)
1	A	72.45	73.07	10	0.062
2	B	70.96	71.66	10	0.070
3	C	69.98	70.65	10	0.067
4	D	67.47	68.12	10	0.065
5	E	10/22/16 DS 69 69.40	69.98	10	0.058
6	F	65.10	65.70	10	0.060
7	G	74.74	75.40	10	0.066
8	H	64.41	64.97	10	0.056
QA 1		65.25	65.20		

$\bar{x} = 0.063$

Sediment Toxicity Lab Report
March 14, 2017 at CR-46R
Dry Weather Event

Micheline Kipf
Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

April 12, 2017

Dear Micheline:

I have enclosed a copy of our report "An Evaluation of the Toxicity of City of Stockton Stormwater Program Sediment Sample" for the sample that was collected March 14, 2017. The results of this testing are summarized below:

Summary of Stockton Stormwater Program sediment effects on *Hyalella azteca*.		
Sample Station	Toxicity Present Relative to Lab Control?	
	Survival	Growth
CR-46RPP	No	**YES**
CR-46RPP-LD	**YES**	**YES**

If you have any questions regarding the performance and interpretation of this testing, please contact my colleague Stephen Clark or myself at (707) 207-7760.

Sincerely,

Michael McElroy
Project Manager

An Evaluation of the Toxicity of City of Stockton Stormwater Program Sediment Samples

Sample collected March 14, 2017

Prepared For:

Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

Prepared By:

Pacific EcoRisk
2250 Cordelia Rd.
Fairfield, CA 94534
(707) 207-7760

April 2017

PACIFIC ECORISK
ENVIRONMENTAL CONSULTING & TESTING

An Evaluation of the Toxicity of City of Stockton Stormwater Program Sediment Samples

Sample collected March 14, 2017

Table of Contents

Appendices

1. INTRODUCTION

In compliance with the City of Stockton Stormwater Program NPDES permit monitoring requirements, Condor Earth Technologies, Inc., has contracted Pacific EcoRisk (PER) to perform evaluations of the toxicity of selected ambient water and sediment samples. The current testing event was designed to meet the sediment monitoring requirements using a sediment sample that were collected on March 14, 2017. This evaluation consisted of performing the US EPA 10-day survival and growth test with the amphipod *Hyalella azteca*. This report describes the performance and results of this testing.

2. SEDIMENT TOXICITY TEST PROCEDURES

This testing followed the guidelines established by the EPA manual "Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition" (EPA/600/R-99/064).

2.1 Receipt and Handling of the Sediment Samples

On October 17, a sediment sample was collected into an appropriately cleaned sample container. This sample was transported on ice and under chain-of-custody, to the PER laboratory in Fairfield, CA (Table 1). The sample was then stored at ≤6˚C until being used to initiate toxicity tests within 14 days of collection. The chain-of-custody record for the collection and delivery of these samples is presented in Appendix A.

Table 1. Sampling stations and date of sediment collection for the Stockton Stormwater Program monitoring.

Sample Station	Date Collected	Date Received
CR-46RPP	3/14/17	3/15/17

2.2 Solid-Phase Sediment Toxicity Testing with *Hyalella azteca*

The sediment toxicity test with *H. azteca* consists of exposing the amphipods to the sediment for 10 days, after which effects on survival and growth are evaluated. The specific procedures used in this testing are described below.

The *H. azteca* used in this testing were obtained from a commercial supplier (Chesapeake Cultures Inc, Hayes, VA). Upon receipt at the laboratory, the amphipods were maintained in tanks containing Lab Water Control medium at 23˚C, and were fed a commercial Yeast-Cerophyll®-Trout chow (YCT) food amended with freeze-dried *Spirulina*.

The Control treatment sediment for this testing consisted of a composite of reference site sediments that have been maintained under culture at the PER lab for >3 months. The sediment sample was tested at the 100% concentration only. Additionally, a laboratory duplicate (designated CR-46RPP-LD) was also performed on the sediment sample. There were eight replicates for each test treatment, each replicate container consisting of a 300-mL tall-form glass beaker with a 3-cm ribbon of 540 µm mesh NITEX attached to the top of the beaker with silicone sealant. Each sediment sample was homogenized prior to loading of sediment into the test replicates. For each sediment, approximately 100 mL of sediment was then loaded into each of the test replicate containers. Each test replicate was then carefully filled with clean Lab Water Control medium (= Standard Artificial Medium [SAM-5S] water [Borgmann 1996]). The test replicates with sediments and clean overlying water were established ~24 hrs prior to the introduction of the amphipods, and were placed in a temperature-controlled room at 23˚C during this pre-test period.

After this initial 24 hr period, the overlying water in each replicate was flushed with one volume (approximately 150 mL) of fresh overlying water. For each test treatment, a small aliquot of the renewed overlying water was then collected from each of the eight replicates and composited for measurement of "initial" water quality characteristics (pH, dissolved oxygen [D.O.], conductivity, alkalinity, hardness, and total ammonia). The testing was then initiated with the random allocation of ten 11-12 day-old amphipods into each replicate, followed by the addition of 1.0 mL of *Spirulina*-amended YCT food. The test replicates were then placed in a temperature-controlled room at 23˚C. At the time of test initiation, eight replicates of 10 randomly-selected organisms were collected, dried, and weighed (described below) to determine the mean dry weight of the test organisms at test initiation (T_0).

Each day, for the following nine days, each test replicate was examined and any dead amphipods were removed via pipette and the mortality recorded. A small aliquot of the overlying water in each of the eight replicates for each test treatment was then collected and composited as before for measurement of "old" D.O., after which each replicate was flushed with one volume of fresh water. Another small aliquot of the overlying water in each of the eight replicates was then collected and composited as before for measurement of "new" D.O., after which each replicate was fed 1.0 mL of *Spirulina*-amended YCT.

After 10 days exposure, testing was terminated. An aliquot of overlying water was collected from each replicate and composited for analysis of the "final" water quality characteristics. The sediments in each replicate container were then carefully sorted and sieved and the number of surviving amphipods determined. The surviving organisms were euthanized in methanol, rinsed in de-ionized water, and transferred to small pre-tared weighing pans, which were placed into a drying oven at 100˚C. After drying for ~24 hrs, the pans were transferred to a desiccator to cool, and then weighed to the nearest 0.01 mg to determine the mean dry weight per surviving organism for each replicate. The resulting survival and growth (mean dry weight) data were then analyzed to evaluate any impairment due to the sediments; all statistical analyses were performed using the CETIS® statistical software (TidePool Scientific, McKinleyville, CA).

3. RESULTS

3.1 Effects of the Stockton Stormwater Program Sediments on *Hyalella azteca*

The results of this testing are summarized below in Table 2. There was no significant reduction in survival in the CR-46RPP sediment sample, but there was in the associated laboratory duplicate sample. There were significant reductions in growth in both sediment samples. The test data and summary of statistical analyses for this testing are presented in Appendix B.

Table 2. Data summary for the Stockton Stormwater Program sediment samples.

Test Treatment	% Survival	% of Control	Toxic? (Y/N)	Mean dry weight (mg)	% of Control	Toxic? (Y/N)
Control	97.5	N/A	N/A	0.24	N/A	N/A
CR-46RPP	96.3	98.7	N	**0.15***	63.3	**Y**
CR-46RPP-LD	**86.2***	88.5	**Y**	**0.18***	72.4	**Y**

* The response at this test treatment was significantly less than the Control sediment response (at $p<0.05$).

4. SUMMARY AND CONCLUSIONS

The results of this testing are summarized below. There was no significant reduction in survival in the CR-46RPP sediment sample, but there was in the associated laboratory duplicate sample. There were significant reductions in growth in both sediment samples.

Summary of Stockton Stormwater Program sediment effects on *Hyalella azteca*.		
Sample Station	Toxicity Present Relative to Lab Control?	
	Survival	Growth
CR-46RPP	No	**YES**
CR-46RPP-LD	**YES**	**YES**

4.1 QA/QC Summary

Test Conditions – All test conditions (pH, D.O., temperature, etc.) were within acceptable limits. All analyses were performed according to laboratory Standard Operating Procedures.

Negative Control – The biological responses for the test organisms at the Lab Control treatment were within acceptable limits.

Appendix A

Chain-of-Custody Record for the Collection and Delivery of the Stockton Stormwater Program Sediment Samples

Condor Earth Technologies, Inc.

CONDOR

☐ PO Box 3905/21663 Brian Lane, Sonora, CA 95370, 209.532.0361, 209.532.0773 fax

☑ 188 Frank West Circle, Suite I, Stockton, CA 95206, 209.234.0518, 209.234.0538 fax

☐ 2941 Sunrise Blvd, Suite 150, Rancho Cordova, CA 95742, 916.783.2060, 916.783.2464 fax

☐ 1739 Ashby Road, Suite B, Merced, CA 95348, 209.388.9601, 209.388.1778 fax

Sample Results TAT: ☐ Rush ☑ Standard

SHIPPED TO:

Pacific EcoRisk
2250 Cordelia Road
Fairfield, CA 94534 (707) 207-7760

SEND RESULTS TO:

NAME: Micheline Doyle Kipf
E-MAIL: mkipf@condorearth.com
E-MAIL:

☑ PLEASE FAX/EMAIL RESULTS TO ADDRESS MARKED ABOVE

PROJECT NAME/LOCATION: COS Urban Discharge | EDF RESULTS REQUIRED ☐ YES ☑ NO | SITE GLOBAL ID:

PROJECT NO.: 6066J-04-01

SAMPLED BY: (Signature)

Date	Time	Sample Site Name	Sample ID (if different)	Matrix	# of containers	Preservatives (see below)	ANALYSIS /METHOD:	Field Filtered	Hyalella azteca*	TOC	Grain size	REMARKS	LAB ID#
3-14-17	1435	1617-DW29-	CR-46RPP	S		1		N	✓	✓	✓	*chronic freshwater (EPA/600/4-91/003)	
—	—	~~1617-DW29-~~	~~FD~~	~~S~~		~~1~~		~~N~~	✓	✓	✓	Hyalella azteca survival & growth	
												Conduct additional pyrethroids	
												analysis if toxicity is observed.	
												Sub samples to be	
												collected for Caltest	
												NO FIELD DUPLICATE PLEASE RUN LAB DUPLICATE IF ENOUGH SAMPLE REMAINS	
												TOC RL= 1 mg/L	

Relinquished By: (Signature)	Date: 3-14-17	Time: 0957	Received By: (Signature)
Relinquished By: (Signature)			Received By: (Signature)

Date: 3/15/17 Time: 0957

Matrix: WW Waste Water; S Soil/Solid; GW Ground Water; DW Drinking Water; HWW Hazardous Waste (Water); SW Storm Water

Preservative: 1 4°C; 2 HCL; 3 NaOH; 4 $Na_2S_2O_3$; 5 HNO_3; 6 H_2SO_4; 7 Other____

Original – Send | Yellow – File | Pink – Log Book

Appendix B

Test Data and Summary of Statistics for the Evaluation of the Toxicity of the Stockton Stormwater Program Sediment Samples to *Hyalella azteca*

CETIS Summary Report

Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Batch ID:	08-9812-6130	**Test Type:**	Survival-Growth (10 day)	**Analyst:**	Yesenia Jaramillo
Start Date:	20 Mar-17 14:10	**Protocol:**	EPA/600/R-99/064 (2000)	**Diluent:**	Not Applicable
Ending Date:	30 Mar-17 12:35	**Species:**	Hyalella azteca	**Brine:**	Not Applicable
Duration:	9d 22h	**Source:**	Chesapeake Cultures, Inc.	**Age:**	11

Sample Code	Sample ID	Sample Date	Receipt Date	Sample Age	Client Name	Project
CESS_03HA_C1	02-9346-4870	20 Mar-17 14:10	20 Mar-17 14:10	n/a (23.3 °C)	Condor Earth Technologi	27085
CR-46RPP	14-8507-9985	14 Mar-17 14:35	15 Mar-17 09:57	6d (0 °C)		
CR-46RPP-LD	02-3287-9522	14 Mar-17 14:35	15 Mar-17 09:57	6d (0 °C)		

Sample Code	Material Type	Sample Source	Station Location	Lat/Long
CESS_03HA_C1	Control Sediment	Condor Earth Technologies	LABQA	
CR-46RPP	Sediment	Condor Earth Technologies	1617-DW29:CR-46RPP	
CR-46RPP-LD	Sediment	Condor Earth Technologies	1617-DW29:CR-46RPP-LD	

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
18-0966-8023	Mean Dry Weight-mg	Equal Variance t Two-Sample Test	<1.0E-37	CR-46RPP failed mean dry weight-mg
16-2557-2861	Mean Dry Weight-mg	Equal Variance t Two-Sample Test	5.9E-04	CR-46RPP-LD failed mean dry weight-mg
20-8614-4884	Survival Rate	Wilcoxon Rank Sum Two-Sample Test	0.5000	CR-46RPP passed survival rate
08-8272-0059	Survival Rate	Equal Variance t Two-Sample Test	0.0149	CR-46RPP-LD failed survival rate

Mean Dry Weight-mg Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CESS_03HA_C1	CS	8	0.242	0.223	0.26	0.191	0.26	0.00785	0.0222	9.18%	0.00%
CR-46RPP		8	0.153	0.142	0.164	0.133	0.171	0.00476	0.0135	8.79%	36.70%
CR-46RPP-LD		8	0.175	0.141	0.209	0.0883	0.221	0.0144	0.0408	23.30%	27.55%

Survival Rate Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CESS_03HA_C1	CS	8	0.975	0.936	1.000	0.900	1.000	0.016	0.046	4.75%	0.00%
CR-46RPP		8	0.963	0.919	1.000	0.900	1.000	0.018	0.052	5.38%	1.28%
CR-46RPP-LD		8	0.862	0.754	0.971	0.600	1.000	0.046	0.130	15.10%	11.54%

Mean Dry Weight-mg Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	0.237	0.26	0.25	0.253	0.253	0.191	0.236	0.254
CR-46RPP		0.133	0.163	0.139	0.167	0.149	0.171	0.148	0.154
CR-46RPP-LD		0.175	0.216	0.221	0.17	0.191	0.168	0.0883	0.172

Survival Rate Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	1.000	0.900	1.000	1.000	1.000	1.000	1.000	0.900
CR-46RPP		1.000	0.900	1.000	1.000	1.000	1.000	0.900	0.900
CR-46RPP-LD		0.800	1.000	0.900	0.800	1.000	0.900	0.600	0.900

Survival Rate Binomials

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	10/10	9/10	10/10	10/10	10/10	10/10	10/10	9/10
CR-46RPP		10/10	9/10	10/10	10/10	10/10	10/10	9/10	9/10
CR-46RPP-LD		8/10	10/10	9/10	8/10	10/10	9/10	6/10	9/10

10-Day *Hyalella azteca* Sediment Toxicity Test Data

Client: **Condor Earth-Stockton Stormwater**
Project#: **27085**
Test ID#: - 71987-71988

Org. Supplier: Chesapeake ~~ABS~~ EP 3/20/17
Org. Log #: 10147
Org. Age/Size: 11-12 days

Day	Date	Test Material: Lab Control	Water Quality Measurements: Parameter	Value	Meter ID	Sign-off:
0	3/20/17	# Live Organisms: A 10 B 10 C 10 D 10 / E 10 F 10 G 10 H 10	pH	7.52	PH21	AM Change: TF
			D.O. (mg/L)	6.4	RD11	WQ: TF
			Conductivity (µS/cm)	542	EC04	Initiation Time: 1410
			Alkalinity (mg/L)	✓ 84.4	PH13 DT18	Initiation Counts: EP
			Hardness (mg/L)	127	DT30	Confirmation Counts: EP
			Ammonia (mg/L)	<1.00	DR3800	PM Feed: EP
			Temp. (°C)	23.3	32A	
1	3/21/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	7.3	RD12	AM Change: JA WQ: JA
			New D.O. (mg/L)	8.5	RD12	Mortality Counts: JA
			Temp. (°C)	23.0	32A	PM Change: JA PM Feed: JA
2	3/22/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	7.2	RD11	AM Change: TC WQ: TC
			New D.O. (mg/L)	7.8	RD12	Mortality Counts: TC
			Temp. (°C)	22.2	32A	PM Change: SJB PM Feed: SJB
3	3/23/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.3	RD11	AM Change: TF WQ: TF
			New D.O. (mg/L)	9.0	RD11	Mortality Counts: TF
			Temp. (°C)	22.8	32A	PM Change: RB PM Feed: RB
4	3/24/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.5	RD12	AM Change: JA WQ: JA
			New D.O. (mg/L)	8.1	RD12	Mortality Counts: JA
			Temp. (°C)	23.5	32A	PM Change: YL PM Feed: YL
5	3/25/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.3	RD10	AM Change: JA WQ: JA
			New D.O. (mg/L)	8.2	RD10	Mortality Counts: JA
			Temp. (°C)	22.3	32A	PM Change: JA PM Feed: JA
6	3/26/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.7	RD12	AM Change: HR WQ: HR
			New D.O. (mg/L)	7.5	RD12	Mortality Counts: HR
			Temp. (°C)	23.1	32A	PM Change: HR PM Feed: HR
7	3/27/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	~~6.9~~ 6.7	RD12	AM Change: JS WQ: JS
			New D.O. (mg/L)	7.8	RD12	Mortality Counts: JS
			Temp. (°C)	22.2	32A	PM Change: JS PM Feed: JS
8	3/28/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.0	RD10	AM Change: TC WQ: TC
			New D.O. (mg/L)	~~7.5~~ 7.7	RD10	Mortality Counts: TC
			Temp. (°C)	23.4	32A	PM Change: RB PM Feed: RB
9	3/29/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.0	RD09	AM Change: SJB WQ: SJB
			New D.O. (mg/L)	6.1	32A	Mortality Counts: SJB
			Temp. (°C)	22.5	32A	PM Change: TF PM Feed: TF
10	3/30/17	# Alive: A 10 B 9 C 10 D 10 / E 10 F 10 G 10 H 9	pH	7.47	PH19	WQ: TF
			D.O. (mg/L)	6.7	RD11	Termination Counts: WC
			Conductivity (µS/cm)	454	EC09	Termination Time: 1235
			Alkalinity (mg/L)	✓ 63.2	PH13 DT24	
			Hardness (mg/L)	129	DT30	
			Ammonia (mg/L)	<1.00	DR3800	
			Temp. (°C)	23.0	32A	

Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Analysis ID:	20-8614-4884	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	05 Apr-17 9:33	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Angular (Corrected)	C > T	CR-46RPP passed survival rate	4.73%

Wilcoxon Rank Sum Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision(α:5%)
Control Sed		CR-46RPP	64	n/a	2	14	Exact	0.5000	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.00166	0.00166	1	0.259	0.6186	Non-Significant Effect
Error	0.0896377	0.0064027	14			
Total	0.0912977		15			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	1.25	8.89	0.7760	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.693	0.841	1.4E-04	Non-Normal Distribution

Survival Rate Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_03HA_C1	CS	8	0.975	0.936	1.000	1.000	0.900	1.000	0.016	4.75%	0.00%
CR-46RPP		8	0.962	0.919	1.000	1.000	0.900	1.000	0.018	5.38%	1.28%

Angular (Corrected) Transformed Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_03HA_C1	CS	8	1.37	1.31	1.43	1.41	1.25	1.41	0.0267	5.50%	0.00%
CR-46RPP		8	1.35	1.28	1.42	1.41	1.25	1.41	0.0298	6.24%	1.49%

Survival Rate Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	1.000	0.900	1.000	1.000	1.000	1.000	1.000	0.900
CR-46RPP		1.000	0.900	1.000	1.000	1.000	1.000	0.900	0.900

Angular (Corrected) Transformed Detail

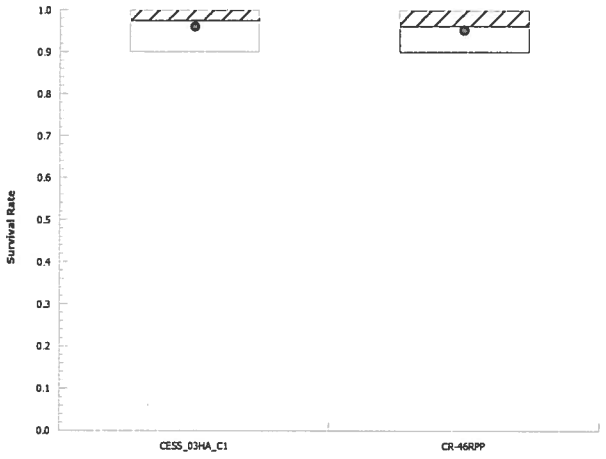
Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	1.41	1.25	1.41	1.41	1.41	1.41	1.41	1.25
CR-46RPP		1.41	1.25	1.41	1.41	1.41	1.41	1.25	1.25

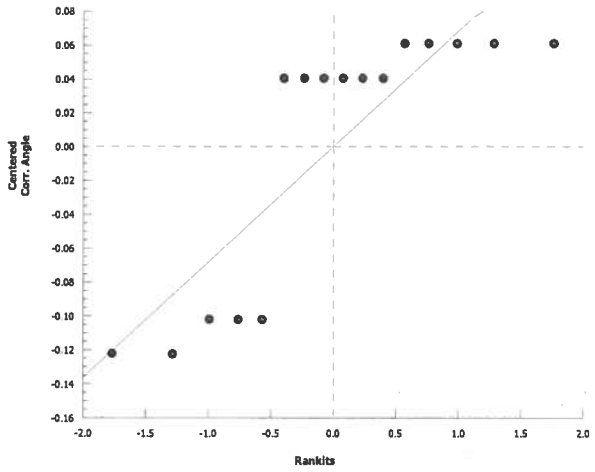
Survival Rate Binomials

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	10/10	9/10	10/10	10/10	10/10	10/10	10/10	9/10
CR-46RPP		10/10	9/10	10/10	10/10	10/10	10/10	9/10	9/10

Hyalella 10-d Survival and Growth Sediment Test					Pacific EcoRisk
Analysis ID:	20-8614-4884	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	05 Apr-17 9:33	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Graphics





Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Analysis ID:	18-0966-8023	**Endpoint:**	Mean Dry Weight-mg	**CETIS Version:**	CETISv1.9.2
Analyzed:	05 Apr-17 9:33	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Untransformed	C > T	CR-46RPP failed mean dry weight-mg	6.68%

Equal Variance t Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Control Sed		CR-46RPP*	9.67	1.76	0.016	14	CDF	<1.0E-37	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0314963	0.0314963	1	93.5	1.4E-07	Significant Effect
Error	0.0047147	0.0003368	14			
Total	0.0362111		15			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	2.72	8.89	0.2105	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.842	0.841	0.0104	Normal Distribution

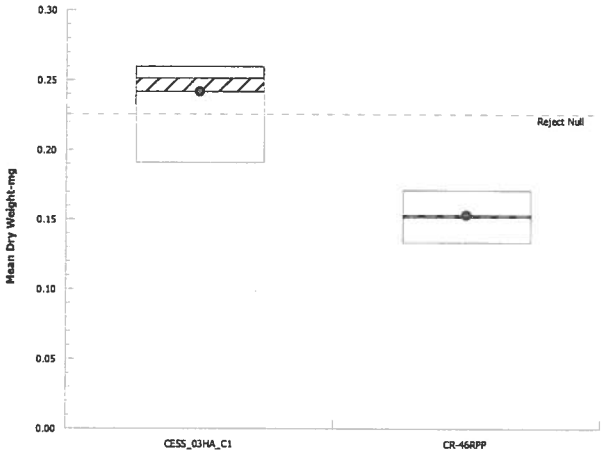
Mean Dry Weight-mg Summary

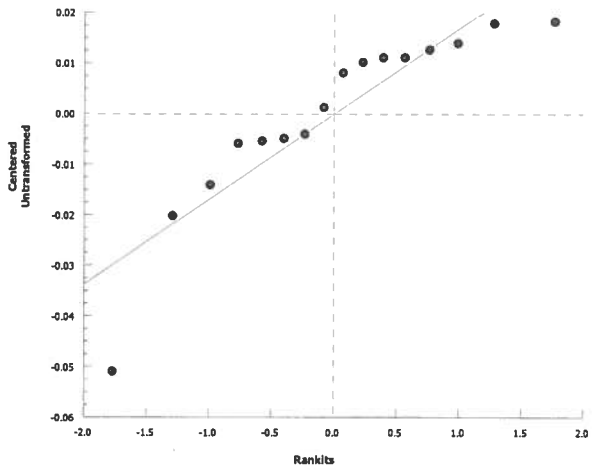
Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_03HA_C1	CS	8	0.242	0.223	0.26	0.251	0.191	0.26	0.00785	9.18%	0.00%
CR-46RPP		8	0.153	0.142	0.164	0.152	0.133	0.171	0.00476	8.79%	36.70%

Mean Dry Weight-mg Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	0.237	0.26	0.25	0.253	0.253	0.191	0.236	0.254
CR-46RPP		0.133	0.163	0.139	0.167	0.149	0.171	0.148	0.154

Graphics





10-Day *Hyalella azteca* Sediment Toxicity Test Data

Client: **Condor Earth-Stockton Stormwater**
Project#: **27085**
Test ID#: - 71987

Org. Supplier: ~~ABS~~ Chesapeake 3/20/17
Org. Log #: 10147
Org. Age/Size: 11-12 days

Day	Date	Test Material: 1617-DW29-CR-46RPP	Water Quality Measurements: Parameter	Value	Meter ID	Sign-off:
0	3/20/17	# Live Organisms: A 10, B 10, C 10, D 10; E 10, F 10, G 10, H 10	pH	7.47	PH 21	AM Change: TF
			D.O. (mg/L)	6.6	RD 11	WQ: TF
			Conductivity (µS/cm)	438	EC 04	Initiation Time: 1410
			Alkalinity (mg/L)	✓63.2	PH 15 DT 10	Initiation Counts: EP
			Hardness (mg/L)	129	DT30	Confirmation Counts: RE
			Ammonia (mg/L)	<1.00	DR3800	PM Feed: EP
			Temp. (°C)	23.3	32A	
1	3/21/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	7.3	RD12	AM Change: JAC WQ: JAC
			New D.O. (mg/L)	8.6	RD12	Mortality Counts: JAC
			Temp. (°C)	23.0	32A	PM Change: JAC PM Feed: JAC
2	3/22/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	7.1	RD11	AM Change: TC WQ: TC
			New D.O. (mg/L)	7.9	RD12	Mortality Counts: TC
			Temp. (°C)	22.2	32A	PM Change: SJB PM Feed: SJB
3	3/23/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	5.9	RD11	AM Change: TF WQ: TF
			New D.O. (mg/L)	8.5	RD11	Mortality Counts: TF
			Temp. (°C)	22.8	32A	PM Change: RB PM Feed: RB
4	3/24/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.5	RD12	AM Change: JAC WQ: JAC
			New D.O. (mg/L)	8.1	RD12	Mortality Counts: JAC
			Temp. (°C)	23.5	32A	PM Change: YLL PM Feed: YLL
5	3/25/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.7	RD10	AM Change: JAC WQ: JAC
			New D.O. (mg/L)	8.2	RD10	Mortality Counts: JAC
			Temp. (°C)	22.3	32A	PM Change: JAC PM Feed: JAC
6	3/26/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	7.6	RD12	AM Change: HR WQ: HR
			New D.O. (mg/L)	7.8	RD12	Mortality Counts: HR
			Temp. (°C)	23.1	32A	PM Change: HR PM Feed: HR
7	3/27/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	7.2	RD12	AM Change: JS WQ: JS
			New D.O. (mg/L)	7.9	RD12	Mortality Counts: JS
			Temp. (°C)	22.2	32A	PM Change: JS PM Feed: JS
8	3/28/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.4	RD10	AM Change: TC WQ: TC
			New D.O. (mg/L)	7.9	RD10	Mortality Counts: TC
			Temp. (°C)	23.4	32A	PM Change: RB PM Feed: RB
9	3/29/17	# of Mortalities: A 0, B 0, C 0, D 0; E 0, F 0, G 0, H 0	Old D.O. (mg/L)	5.2	RD09	AM Change: SJB WQ: SJB
			New D.O. (mg/L)	6.3	RD09	Mortality Counts: SJB
			Temp. (°C)	22.5	32A	PM Change: TF PM Feed: TF
10	3/30/17	# Alive: A 10, B 9, C 10, D 10; E 10, F 10, G 9, H 9	pH	7.37	PH 19	WQ: TF
			D.O. (mg/L)	6.8	RD11	Termination Counts: WC
			Conductivity (µS/cm)	441	EC 09	Termination Time: 1235
			Alkalinity (mg/L)	✓57.6	PH 13 DT 24	
			Hardness (mg/L)	131	DT30	
			Ammonia (mg/L)	<1.00	DR3800	
			Temp. (°C)	23.1	32A	

Hyalella azteca Weight Data Sheets

Client: **Condor Earth: Stockton Stormwater** Project #: **27085** Balance ID: BAL04

Sample ID: **1617-DW29-CR-46-RPP** Tare Wt Date: 3/21/17 Sign-Off: JAM

Test ID #: **71987** Final Wt Date: 4/3/17 Sign-Off: KC

Pan	Concentration	Replicate	Initial Weight. (mg)	Final Weight. (mg)	# organisms	Ave Weight (mg)
1	Control	A	70.61	72.98	10	0.237
2	Sediment	B	59.82	62.16	wc 3/30/17 ~~10~~ 9	0.260
3		C	66.78	69.28	10	0.250
4		D	61.42	63.95	10	0.253
5		E	56.23	58.76	10	0.253
6		F	65.30	67.21	10	0.191
7		G	70.52	72.88	10	0.236
8		H	68.40	70.69	9	0.254
9	100%	A	60.77	62.10	10	0.133
10		B	65.35	66.82	9	0.163
11		C	75.41	76.80	10	0.139
12		D	60.82	62.49	10	0.167
13		E	60.45	61.94	10	0.149
14		F	72.84	74.55	10	~~0.149~~ 0.171
15		G	68.33	69.66	9	0.148
16		H	61.56	62.95	9	0.154
QA1			68.50	68.50		

Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Analysis ID:	08-8272-0059	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	05 Apr-17 9:33	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Angular (Corrected)	C > T	CR-46RPP-LD failed survival rate	7.44%

Equal Variance t Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Control Sed		CR-46RPP-LD*	2.42	1.76	0.118	14	CDF	0.0149	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.105405	0.105405	1	5.85	0.0297	Significant Effect
Error	0.252108	0.0180077	14			
Total	0.357512		15			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	5.33	8.89	0.0422	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.848	0.841	0.0129	Normal Distribution

Survival Rate Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_03HA_C1	CS	8	0.975	0.936	1.000	1.000	0.900	1.000	0.016	4.75%	0.00%
CR-46RPP-LD		8	0.862	0.754	0.971	0.900	0.600	1.000	0.046	15.10%	11.54%

Angular (Corrected) Transformed Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_03HA_C1	CS	8	1.37	1.31	1.43	1.41	1.25	1.41	0.0267	5.50%	0.00%
CR-46RPP-LD		8	1.21	1.06	1.35	1.25	0.886	1.41	0.0616	14.40%	11.84%

Survival Rate Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	1.000	0.900	1.000	1.000	1.000	1.000	1.000	0.900
CR-46RPP-LD		0.800	1.000	0.900	0.800	1.000	0.900	0.600	0.900

Angular (Corrected) Transformed Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	1.41	1.25	1.41	1.41	1.41	1.41	1.41	1.25
CR-46RPP-LD		1.11	1.41	1.25	1.11	1.41	1.25	0.886	1.25

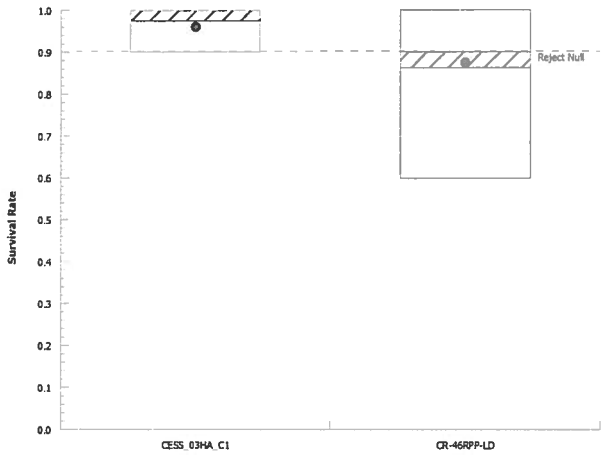
Survival Rate Binomials

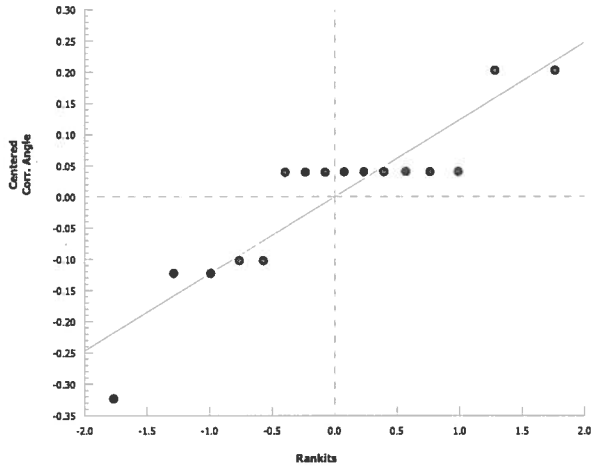
Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	10/10	9/10	10/10	10/10	10/10	10/10	10/10	9/10
CR-46RPP-LD		8/10	10/10	9/10	8/10	10/10	9/10	6/10	9/10

Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Analysis ID:	08-8272-0059	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	05 Apr-17 9:33	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Graphics





Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Analysis ID:	16-2557-2861	**Endpoint:**	Mean Dry Weight-mg	**CETIS Version:**	CETISv1.9.2
Analyzed:	05 Apr-17 9:33	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Untransformed	C > T	CR-46RPP-LD failed mean dry weight-mg	11.96%

Equal Variance t Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Control Sed		CR-46RPP-LD*	4.06	1.76	0.029	14	CDF	5.9E-04	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0177556	0.0177556	1	16.5	0.0012	Significant Effect
Error	0.0151056	0.001079	14			
Total	0.0328612		15			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	3.38	8.89	0.1303	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.847	0.841	0.0125	Normal Distribution

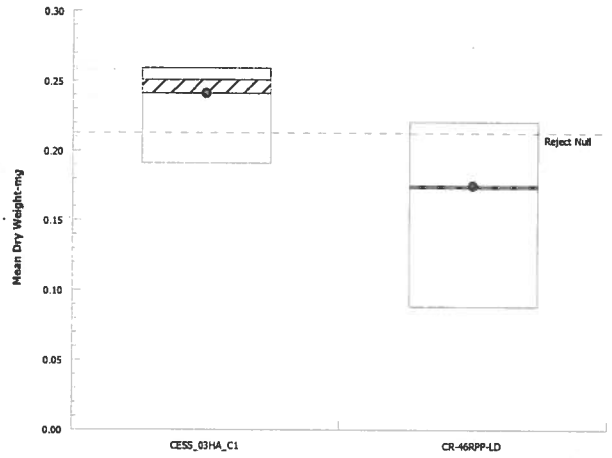
Mean Dry Weight-mg Summary

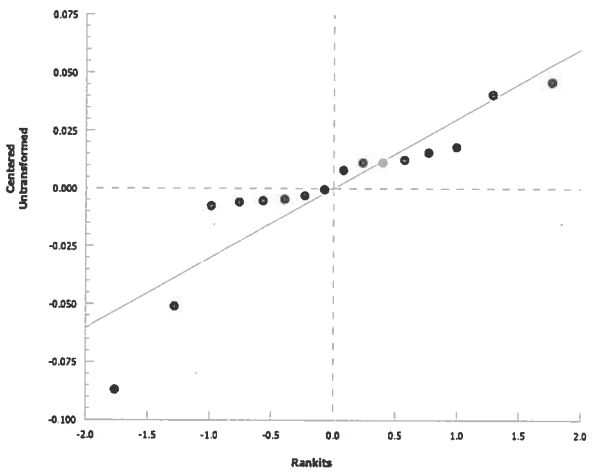
Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_03HA_C1	CS	8	0.242	0.223	0.26	0.251	0.191	0.26	0.00785	9.18%	0.00%
CR-46RPP-LD		8	0.175	0.141	0.209	0.174	0.0883	0.221	0.0144	23.30%	27.55%

Mean Dry Weight-mg Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_03HA_C1	CS	0.237	0.26	0.25	0.253	0.253	0.191	0.236	0.254
CR-46RPP-LD		0.175	0.216	0.221	0.17	0.191	0.168	0.0883	0.172

Graphics





10-Day *Hyalella azteca* Sediment Toxicity Test Data

Client: **Condor Earth-Stockton Stormwater**
Project#: **27085**
Test ID#: - 71988

Org. Supplier: ~~ABS~~ Chesapeake 3/20/17
Org. Log #: 10147
Org. Age/Size: 11-12 days

Day	Date	Test Material: 1617-DW29-CR-46RPP-LD	Water Quality Measurements: Parameter	Value	Meter ID	Sign-off:
0	3/20/17	# Live Organisms: A 10 B 10 C 10 D 10 / E 10 F 10 G 10 H 10	pH	7.41	PH21	AM Change: TF
			D.O. (mg/L)	6.4	RD11	WQ: TF
			Conductivity (µS/cm)	440	EC04	Initiation Time: 1410
			Alkalinity (mg/L)	✓62.4	PH15 DT24	Initiation Counts: EP
			Hardness (mg/L)	130	DT30	Confirmation Counts: EP
			Ammonia (mg/L)	0.00	DR3800	PM Feed: EP
			Temp. (°C)	23.3	32A	
1	3/21/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	7.2	RD12	AM Change: JA WQ: JA
			New D.O. (mg/L)	8.5	RD12	Mortality Counts: JA
			Temp. (°C)	23.0	32A	PM Change: JA PM Feed: JA
2	3/22/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	7.2	RD11	AM Change: TC WQ: TC
			New D.O. (mg/L)	8.0	RD12	Mortality Counts: TC
			Temp. (°C)	22.2	32A	PM Change: SJB PM Feed: SJB
3	3/23/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.9	RD11	AM Change: TF WQ: TF
			New D.O. (mg/L)	8.5	RD11	Mortality Counts: TF
			Temp. (°C)	22.8	32A	PM Change: RB PM Feed: RB
4	3/24/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.5	RD12	AM Change: JA WQ: JA
			New D.O. (mg/L)	8.1	RD12	Mortality Counts: JA
			Temp. (°C)	23.5	32A	PM Change: JA PM Feed: JA
5	3/25/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.6	RD10	AM Change: JA WQ: JA
			New D.O. (mg/L)	8.1	RD10	Mortality Counts: JA
			Temp. (°C)	22.3	32A	PM Change: JA PM Feed: JA
6	3/26/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.7	RD12	AM Change: HR WQ: HR
			New D.O. (mg/L)	7.7	RD12	Mortality Counts: HR
			Temp. (°C)	23.1	32A	PM Change: HR PM Feed: HR
7	3/27/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	7.6	RD12	AM Change: JS WQ: JS
			New D.O. (mg/L)	7.8	RD12	Mortality Counts: JS
			Temp. (°C)	22.2	32A	PM Change: JS PM Feed: JS
8	3/28/17	# of Mortalities: A 0 B 0 C 0 D 1 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.4	RD10	AM Change: TC WQ: TC
			New D.O. (mg/L)	7.8	RD10	Mortality Counts: TC
			Temp. (°C)	23.4	32A	PM Change: RB PM Feed: RB
9	3/29/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.3	RD09	AM Change: SJB WQ: SJB
			New D.O. (mg/L)	6.3	RD09	Mortality Counts: SJB
			Temp. (°C)	22.5	32A	PM Change: TF PM Feed: TF
10	3/30/17	# Alive: A 8 B 10 C 9 D 8 / E 10 F 9 G 6 H 9	pH	7.32	PH 19	WQ: TF
			D.O. (mg/L)	7.1	RD11	Termination Counts: WC
			Conductivity (µS/cm)	428	EC09	Termination Time: 1235
			Alkalinity (mg/L)	✓57.2	PH15 DT24	
			Hardness (mg/L)	131	DT30	
			Ammonia (mg/L)	41.00	DR3800	
			Temp. (°C)	23.0	32A	

Hyalella azteca Weight Data Sheets

Client: **Condor Earth: Stockton Stormwater** Project #: **27085** Balance ID: BAL04

Sample ID: **1617-DW29-CR-46RPP-LD** Tare Wt Date: 3/21/17 Sign-Off: JM

Test ID #: **71988** Final Wt Date: 4/3/17 Sign-Off: MC

Pan	Concentration Replicate		Initial Weight. (mg)	Final Weight. (mg)	# organisms	Ave Weight (mg)
1	Control	A	70.61	72.98	10	0.237
2	Sediment	B	59.82	62.16	9	0.260
3		C	66.78	69.28	10	0.250
4		D	61.42	63.95	10	0.253
5		E	56.23	58.76	10	0.253
6		F	65.30	67.21	10	0.191
7		G	70.52	72.88	10	0.236
8		H	68.40	70.69	9	0.254
17	100%	A	56.35	57.75	8	0.175
18	LD	B	67.29	69.45	10	0.216
19		C	69.48	71.47	9	0.221
20		D	69.16	70.52	8	0.170
21		E	70.64	72.55	10	0.191
22		F	67.11	68.62	9	0.169
23		G	66.17	66.70	6	0.088 4/5/17
24		H	62.30	63.85	9	~~0.155~~ 0.172
QA2			70.96	71.02		

Hyalella azteca Weight Data Sheets

Client: **Condor Earth: Stockton Stormwater** Test Init Date: 3/20/17 Balance ID: Bal 04

Sample ID: **T0** Tare Wt Date: 3/19/17 Sign-Off: MR

Test ID: 71987-71988 Final Wt Date: 3/22/17 Sign-Off: JS

Project #: 27085

Pan	Concentration Replicate		Initial Weight. (mg)	Final Weight. (mg)	# Organisms	Ave Weight (mg)
1	T0	A	61.78	62.49	10	0.071
2		B	62.54	63.26	10	0.072
3		C	61.98	62.85	10	0.087
4		D	67.06	67.81	10	0.075
5		E	67.33	68.09	10	0.076
6		F	69.25	70.00	10	0.075
7		G	66.47	67.18	10	0.071
8		H	62.86	63.63	10	0.077
QA			64.42	64.45		

BAL04

$\bar{x} = 0.076$

Sediment Toxicity Lab Report
June 1, 2017 at CR-46R
Dry Weather Event

Micheline Kipf
Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

July 3, 2017

Dear Micheline:

I have enclosed a copy of our report "An Evaluation of the Toxicity of a City of Stockton Stormwater Program Sediment Sample" for the sample that was collected June 1, 2017. The results of this testing are summarized below:

Summary of Stockton Stormwater Program sediment effects on *Hyalella azteca*.		
Sample Station	Toxicity Present Relative to Lab Control?	
	Survival	Growth
CR-46RPP	**Yes**	No

If you have any questions regarding the performance and interpretation of this testing, please contact my colleague Michael McElroy or myself at (707) 207-7760.

Sincerely,

Stephen L. Clark
Vice President/Special Projects Director

An Evaluation of the Toxicity of City of a Stockton Stormwater Program Sediment Sample

Sample collected June 1, 2017

Prepared For:

Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

Prepared By:

Pacific EcoRisk
2250 Cordelia Rd.
Fairfield, CA 94534
(707) 207-7760

July 2017

PACIFIC ECORISK
ENVIRONMENTAL CONSULTING & TESTING

An Evaluation of the Toxicity of a City of Stockton Stormwater Program Sediment Sample

Sample collected June 1, 2017

Table of Contents

Appendices

1. INTRODUCTION

In compliance with the City of Stockton Stormwater Program NPDES permit monitoring requirements, Condor Earth Technologies, Inc., has contracted Pacific EcoRisk (PER) to perform evaluations of the toxicity of selected ambient water and sediment samples. The current testing event was designed to meet the sediment monitoring requirements using a sediment sample that was collected on June 1, 2017. This evaluation consisted of performing the US EPA 10-day survival and growth test with the amphipod *Hyalella azteca*. This report describes the performance and results of this testing.

2. SEDIMENT TOXICITY TEST PROCEDURES

This testing followed the guidelines established by the EPA manual "Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, Second Edition" (EPA/600/R-99/064).

2.1 Receipt and Handling of the Sediment Samples

On June 1, a sediment sample was collected into an appropriately cleaned sample container. This sample was transported on ice and under chain-of-custody, to the PER laboratory in Fairfield, CA (Table 1). The sample was then stored at ≤6˚C until being used to initiate toxicity test within 14 days of collection. The chain-of-custody record for the collection and delivery of the sample is presented in Appendix A.

Table 1. Sampling station and date of sediment collection for the Stockton Stormwater Program monitoring.

Sample Station	Date Collected	Date Received
CR-46RPP	6/1/17	6/2/17

2.2 Solid-Phase Sediment Toxicity Testing with *Hyalella azteca*

The sediment toxicity test with *H. azteca* consists of exposing the amphipods to the sediment for 10 days, after which effects on survival and growth are evaluated. The specific procedures used in this testing are described below.

The *H. azteca* used in this testing were obtained from a commercial supplier (Chesapeake Cultures Inc, Hayes, VA). Upon receipt at the laboratory, the amphipods were maintained in tanks containing Lab Water Control medium at 23˚C, and were fed a commercial Yeast-Cerophyll®-Trout chow (YCT) food amended with freeze-dried *Spirulina*.

The Control treatment sediment for this testing consisted of a composite of reference site sediments that have been maintained under culture at the PER lab for >3 months. The sediment sample was tested at the 100% concentration only. There were eight replicates for each test treatment, each replicate container consisting of a 300-mL tall-form glass beaker with a 3-cm ribbon of 540 µm mesh NITEX attached to the top of the beaker with silicone sealant. Each sediment sample was homogenized prior to loading of sediment into the test replicates. For each sediment, approximately 100 mL of sediment was then loaded into each of the test replicate containers. Each test replicate was then carefully filled with clean Lab Water Control medium (Standard Artificial Medium [SAM-5S] water [Borgmann 1996]). The test replicates with sediments and clean overlying water were established ~24 hrs prior to the introduction of the amphipods, and were placed in a temperature-controlled room at 23˚C during this pre-test period.

After this initial 24 hr period, the overlying water in each replicate was flushed with one volume (approximately 150 mL) of fresh overlying water. For each test treatment, a small aliquot of the renewed overlying water was then collected from each of the eight replicates and composited for measurement of "initial" water quality characteristics (pH, dissolved oxygen [D.O.], conductivity, alkalinity, hardness, and total ammonia). The testing was then initiated with the random allocation of ten 10 day-old amphipods into each replicate, followed by the addition of 1.0 mL of *Spirulina*-amended YCT food. The test replicates were then placed in a temperature-controlled room at 23˚C. At the time of test initiation, eight replicates of 10 randomly-selected organisms were collected, dried, and weighed (described below) to determine the mean dry weight of the test organisms at test initiation (T_0).

Each day, for the following nine days, each test replicate was examined and any dead amphipods were removed via pipette and the mortality recorded. A small aliquot of the overlying water in each of the eight replicates for each test treatment was then collected and composited as before for measurement of "old" D.O., after which each replicate was flushed with one volume of fresh water. Another small aliquot of the overlying water in each of the eight replicates was then collected and composited as before for measurement of "new" D.O., after which each replicate was fed 1.0 mL of *Spirulina*-amended YCT.

After 10 days exposure, testing was terminated. An aliquot of overlying water was collected from each replicate and composited for analysis of the "final" water quality characteristics. The sediments in each replicate container were then carefully sorted and sieved and the number of surviving amphipods determined. The surviving organisms were euthanized in methanol, rinsed in de-ionized water, and transferred to small pre-tared weighing pans, which were placed into a drying oven at 100˚C. After drying for ~24 hrs, the pans were transferred to a desiccator to cool, and then weighed to the nearest 0.01 mg to determine the mean dry weight per surviving organism for each replicate. The resulting survival and growth (mean dry weight) data were then analyzed to evaluate any impairment due to the sediments; all statistical analyses were performed using the CETIS® statistical software (TidePool Scientific, McKinleyville, CA).

3. RESULTS

Test results are summarized in Table 2. There was a significant reduction in survival in the CR-46RPP sediment sample. There was no significant reduction in growth in the sediment sample. The test data and summary of statistical analyses for this testing are presented in Appendix B.

Table 2. Data summary for the Stockton Stormwater Program sediment samples.

Test Treatment	% Survival	% Reduction	Toxic? (Y/N)	Mean dry weight (mg)	% Reduction	Toxic? (Y/N)
Control	100	N/A	N/A	0.204	N/A	N/A
CR-46RPP	**48.8***	51.2%	**Y**	0.188	8.1%	N

* The response at this test treatment was significantly less than the Control sediment response (at $p<0.05$).

4. SUMMARY AND CONCLUSIONS

The results of this testing are summarized below. There was a significant reduction in survival in the CR-46RPP sediment sample. There was ***no*** significant reduction in growth in the sediment sample.

Summary of Stockton Stormwater Program sediment effects on *Hyalella azteca*.

Sample Station	Toxicity Present Relative to Lab Control?	
	Survival	Growth
CR-46RPP	**YES**	No

4.1 QA/QC Summary

Test Conditions – All test conditions (pH, D.O., temperature, etc.) were within acceptable limits. All analyses were performed according to laboratory Standard Operating Procedures.

Negative Control – The biological responses for the test organisms at the Lab Control treatment were within acceptable limits.

Appendix A

Chain-of-Custody Record for the Collection and Delivery of the Stockton Stormwater Program Sediment Sample

Condor Earth Technologies, Inc.

CONDOR

☐ PO Box 3905/21663 Brian Lane, Sonora, CA 95370, 209.532.0361, 209.532.0773 fax

☑ 188 Frank West Circle, Suite I, Stockton, CA 95206, 209.234.0518, 209.234.0538 fax

☐ 2941 Sunrise Blvd, Suite 150, Rancho Cordova, CA 95742, 916.783.2060, 916.783.2464 fax

☐ 1739 Ashby Road, Suite B, Merced, CA 95348, 209.388.9601, 209.388.1778 fax

Sample Results TAT: ☐ Rush ☑ Standard

SHIPPED TO:

Pacific EcoRisk
2250 Cordelia Road
Fairfield, CA 94534 (707) 207-7760

SEND RESULTS TO:

NAME: Micheline Doyle Kipf
E-MAIL: mkipf@condorearth.com
E-MAIL: lmulvey@condorearth.com

☑ PLEASE FAX/EMAIL RESULTS TO ADDRESS MARKED ABOVE

PROJECT NAME/LOCATION: COS Urban Discharge | EDF RESULTS REQUIRED ☐YES ☑NO | SITE GLOBAL ID:

PROJECT NO.: 6066J-04-01

SAMPLED BY: (Signature) LM/KD

Date	Time	Sample Site Name	Sample ID (if different)	Matrix	# of containers	Preservatives (see below)	ANALYSIS /METHOD:	Field Filtered	Hyalella azteca*	TOC	Grain size	JJ (CONDOR)					REMARKS	LAB ID#
6/1/17	1445	1617-DW30-	CR-46RPP	S		1		N	✓	✓	✓	2 BAGS → 1 SAMPLE					*chronic freshwater (EPA/600/4-91/003)	
												PLEASE COMPOSITE AND RUN AS 1 SAMPLE					Hyalella azteca survival & growth	
																	Conduct additional pyrethroids	
																	analysis if toxicity is observed.	
																	Sub samples to be	
																	collected for Caltest	
																	TOC RL= 1 mg/L	

Relinquished By: (Signature)	Date: 6-2-2017	Time: 0956	Received By: (Signature) Jackie Bowgiski PETR	Date: 6/2/17	Time: 0956
Relinquished By: (Signature)			Received By: (Signature)		

Matrix: WW Waste Water; S Soil/Solid; GW Ground Water; DW Drinking Water; HWW Hazardous Waste (Water); SW Storm Water

Preservative: 1 4°C; 2 HCL; 3 NaOH; 4 $Na_2S_2O_3$; 5 HNO_3; 6 H_2SO_4; 7 Other_____

Original – Send | Yellow – File | Pink – Log Book

Appendix B

Test Data and Summary of Statistics for the Evaluation of the Toxicity of the Stockton Stormwater Program Sediment Sample to *Hyalella azteca*

CETIS Summary Report

Hyalella 10-d Survival and Growth Sediment Test — **Pacific EcoRisk**

Batch ID:	17-1037-8178	**Test Type:**	Survival-Growth (10 day)	**Analyst:**	Yesenia Jaramillo
Start Date:	04 Jun-17 12:00	**Protocol:**	EPA/600/R-99/064 (2000)	**Diluent:**	Not Applicable
Ending Date:	14 Jun-17 13:20	**Species:**	Hyalella azteca	**Brine:**	Not Applicable
Duration:	10d 1h	**Source:**	Chesapeake Cultures, Inc.	**Age:**	10

Sample Code	Sample ID	Sample Date	Receipt Date	Sample Age	Client Name	Project
CESS_0617HA	03-1664-0605	04 Jun-17 12:00	04 Jun-17 12:00	n/a (22.6 °C)	Condor Earth Technologi	27494
CR-46RPP	02-3879-7097	01 Jun-17 14:45	02 Jun-17 09:56	69h		

Sample Code	Material Type	Sample Source	Station Location	Lat/Long
CESS_0617HA	Control Sediment	Condor Earth Technologies	LABQA	
CR-46RPP	Sediment	Condor Earth Technologies	CR-46RPP	

SIngle Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
19-0868-7986	Mean Dry Weight-mg	Equal Variance t Two-Sample Test	0.1862	CR-46RPP passed mean dry weight-mg
12-5408-5685	Survival Rate	Wilcoxon Rank Sum Two-Sample Test	7.8E-05	CR-46RPP failed survival rate

Mean Dry Weight-mg Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CESS_0617HA	CS	8	0.204	0.186	0.223	0.182	0.244	0.00789	0.0223	10.93%	0.00%
CR-46RPP		8	0.188	0.15	0.226	0.122	0.257	0.016	0.0454	24.17%	8.07%

Survival Rate Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CESS_0617HA	CS	8	1.000	1.000	1.000	1.000	1.000	0.000	0.000	0.00%	0.00%
CR-46RPP		8	0.488	0.336	0.639	0.300	0.800	0.064	0.181	37.08%	51.25%

Mean Dry Weight-mg Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_0617HA	CS	0.189	0.182	0.197	0.188	0.19	0.244	0.218	0.226
CR-46RPP		0.174	0.177	0.257	0.222	0.205	0.122	0.133	0.212

Survival Rate Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_0617HA	CS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CR-46RPP		0.500	0.300	0.300	0.500	0.400	0.800	0.700	0.400

Survival Rate Binomials

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8
CESS_0617HA	CS	10/10	10/10	10/10	10/10	10/10	10/10	10/10	10/10
CR-46RPP		5/10	3/10	3/10	5/10	4/10	8/10	7/10	4/10

Hyalella 10-d Survival and Growth Sediment Test — Pacific EcoRisk

Analysis ID:	12-5408-5685	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	16 Jun-17 9:25	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Angular (Corrected)	C > T	CR-46RPP failed survival rate	7.45%

Wilcoxon Rank Sum Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision(α:5%)
Control Sed		CR-46RPP*	36	n/a	0	14	Exact	7.8E-05	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.62455	1.62455	1	91	1.7E-07	Significant Effect
Error	0.249895	0.0178496	14			
Total	1.87444		15			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	1.41E+14	8.89	<1.0E-37	Unequal Variances
Distribution	Shapiro-Wilk W Normality Test	0.8	0.841	0.0027	Non-Normal Distribution

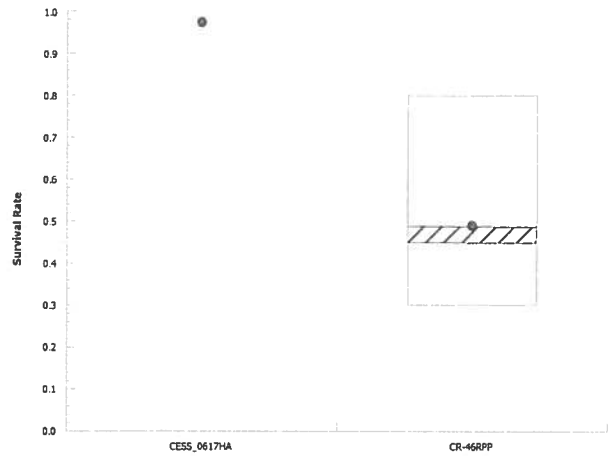
Survival Rate Summary

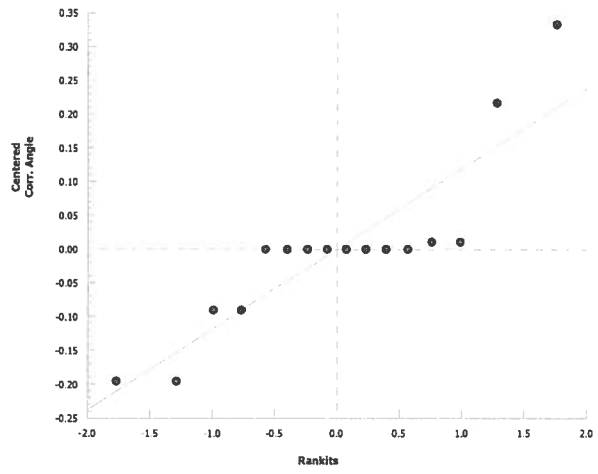
Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_0617HA	CS	8	1.000	1.000	1.000	1.000	1.000	1.000	0.000	0.00%	0.00%
CR-46RPP		8	0.488	0.336	0.639	0.450	0.300	0.800	0.064	37.08%	51.25%

Angular (Corrected) Transformed Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_0617HA	CS	8	1.41	1.41	1.41	1.41	1.41	1.41	0	0.00%	0.00%
CR-46RPP		8	0.775	0.617	0.933	0.735	0.58	1.11	0.0668	24.39%	45.13%

Graphics





Hyalella 10-d Survival and Growth Sediment Test — Pacific EcoRisk

Analysis ID:	19-0868-7986	**Endpoint:**	Mean Dry Weight-mg	**CETIS Version:**	CETISv1.9.2
Analyzed:	16 Jun-17 9:25	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Untransformed	C > T	CR-46RPP passed mean dry weight-mg	15.42%

Equal Variance t Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Control Sed		CR-46RPP	0.921	1.76	0.032	14	CDF	0.1862	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0010859	0.0010859	1	0.849	0.3724	Non-Significant Effect
Error	0.0179049	0.0012789	14			
Total	0.0189907		15			

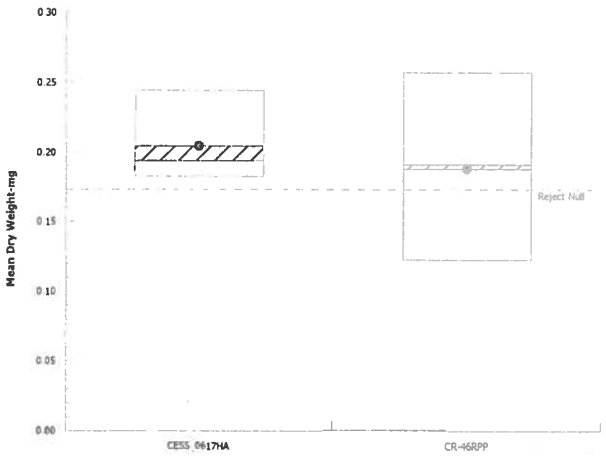
Distributional Tests

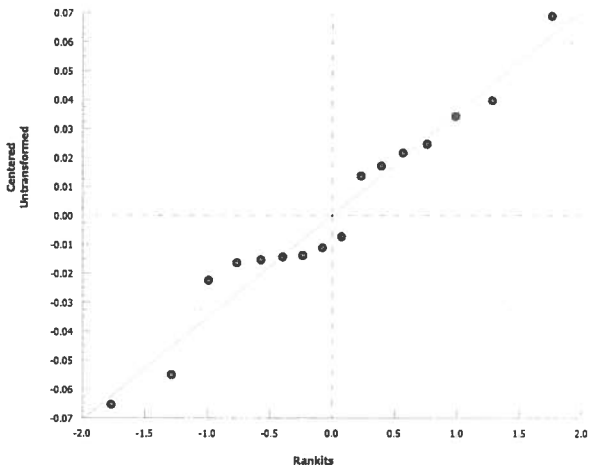
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	4.13	8.89	0.0810	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.964	0.841	0.7417	Normal Distribution

Mean Dry Weight-mg Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CESS_0617HA	CS	8	0.204	0.186	0.223	0.194	0.182	0.244	0.00789	10.93%	0.00%
CR-46RPP		8	0.188	0.15	0.226	0.191	0.122	0.257	0.016	24.17%	8.07%

Graphics





10-Day *Hyalella azteca* Sediment Toxicity Test Data

Client: Condor Earth: Stockton Stormwater Project#: 27494 Organism Log #: 10336 Age: SH 6/4/17 10 1 Dc

Species: *Hyalella azteca* Test ID#: 73187-88 JL 6/2/17 Organism Supplier: **Chesapeake Cultures**

Day	Date	Test Material: Control	Water Quality Measurements: Parameter	Value	Meter ID	Sign-off:
0	6/4/17	# Live Organisms: A 10, B 10, C 10, D 10, E 10, F 10, G 10, H 10	pH	7.75 7.54	PH23	AM Change: 1115
			D.O. (mg/L)	7.2 7.5	RD09	WQ: TA
			Conductivity (µS/cm)	432 506	EC09	Initiation Time: 1200
			Alkalinity (mg/L)	64		Initiation Counts: SH
			Hardness (mg/L)	130.8		Confirmation Counts: TK
			Ammonia (mg/L)	<1.00	DR3800	PM Feed: TK
			Temp. (°C)	22.6	34F	
1	6/5/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	7.0	RD10	AM Change: TF WQ: TF
			New D.O. (mg/L)	8.1	RD10	Mortality Counts: TF
			Temp. (°C)	22.6	35F	PM Change: RB PM Feed: RB
2	6/6/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	5.8	RD11	AM Change: NB WQ: NB
			New D.O. (mg/L)	7.7	RD11	Mortality Counts: NB
			Temp. (°C)	23.4	35F	PM Change: NB PM Feed: NB
3	6/7/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	5.9	RD11	AM Change: MB WQ: MB
			New D.O. (mg/L)	7.5	RD11	Mortality Counts: MB
			Temp. (°C)	23.2	35F	PM Change: JA PM Feed: JA
4	6/8/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.6	RD11	AM Change: TF WQ: TF
			New D.O. (mg/L)	7.5	RD11	Mortality Counts: TF
			Temp. (°C)	22.4	35F	PM Change: MB PM Feed: MB
5	6/9/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.6	RD09	AM Change: WQ:
			New D.O. (mg/L)	7.7	RD09	Mortality Counts:
			Temp. (°C)	22.0	48A	PM Change: PM Feed: YL
6	6/10/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.4	RD09	AM Change: NB WQ: NB
			New D.O. (mg/L)	7.8	RD09	Mortality Counts: NB
			Temp. (°C)	22.0	48A	PM Change: NB PM Feed: NB
7	6/11/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	6.1	RD12	AM Change: RB WQ: RB
			New D.O. (mg/L)	7.7	RD12	Mortality Counts: RB
			Temp. (°C)	22.2	48A	PM Change: SH PM Feed: SH
8	6/12/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	3.6	RD11	AM Change: YL WQ: YL
			New D.O. (mg/L)	8.4	RD11	Mortality Counts: YL
			Temp. (°C)	22.2	48A	PM Change: YL PM Feed: YL
9	6/13/17	# of Mortalities: A 0, B 0, C 0, D 0, E 0, F 0, G 0, H 0	Old D.O. (mg/L)	5.4	RD11	AM Change: SB WQ: SB
			New D.O. (mg/L)	7.6	RD11	Mortality Counts: SB
			Temp. (°C)	22.2	48A	PM Change: YL PM Feed: YL
10	6/14/17	# Alive: A 10, B 10, C 10, D 10, E 10, F 10, G 10, H 10	pH	7.35	PH21	WQ: YL
			D.O. (mg/L)	4.6	RD11	Termination Counts: DM
			Conductivity (µS/cm)	451	EC08	Termination Time: 1320
			Alkalinity (mg/L)	✓69		
			Hardness (mg/L)	✓133		
			Ammonia (mg/L)	<1.00	DR3800	
			Temp. (°C)	22.2	48A	

10-Day *Hyalella azteca* Sediment Toxicity Test Data

Client: Condor Earth: Stockton Stormwater Project#: 27494 Organism Log #: 10336 Age: 10 d.

Species: *Hyalella azteca* Test ID#: 73187 Organism Supplier: Chesapeake Cultures

Day	Date	Test Material: 1617-DW30-CR-46RPP	Water Quality Measurements: Parameter	Value	Meter ID	Sign-off:
0	6/4/17	# Live Organisms: A 10 B 10 C 10 D 10 / E 10 F 10 G 10 H 10	pH	7.58	PH23	AM Change: 1115
			D.O. (mg/L)	7.1	RD09	WQ: TA
			Conductivity (µS/cm)	422	EC09	Initiation Time: 1200
			Alkalinity (mg/L)	62		Initiation Counts: SH
			Hardness (mg/L)	133.2		Confirmation Counts: TK
			Ammonia (mg/L)	<1.00	DR3800	PM Feed: TK
			Temp. (°C)	22.6	34F	
1	6/5/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.6	RD10	AM Change: TF WQ: TF
			New D.O. (mg/L)	7.9	RD10	Mortality Counts: TF
			Temp. (°C)	22.6	35F	PM Change: RB PM Feed: RB
2	6/6/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.4	RD11	AM Change: MB WQ: MB
			New D.O. (mg/L)	7.9	RD11	Mortality Counts: MB
			Temp. (°C)	23.4	35F	PM Change: MB PM Feed: MB
3	6/7/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.3	RD11	AM Change: MB WQ: MB
			New D.O. (mg/L)	7.0	RD11	Mortality Counts: MB
			Temp. (°C)	23.2	35F	PM Change: JM PM Feed: JM
4	6/8/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.4	RD11	AM Change: TF WQ: TF
			New D.O. (mg/L)	7.3	RD11	Mortality Counts: TF
			Temp. (°C)	22.4	35F	PM Change: MB PM Feed: MB
5	6/9/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.0	RD09	AM Change: JM WQ: JM
			New D.O. (mg/L)	7.4	RD09	Mortality Counts: JM
			Temp. (°C)	22.0	48A	PM Change: YU PM Feed: YU
6	6/10/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	6.8	RD09	AM Change: MB WQ: MB
			New D.O. (mg/L)	8.0	RD09	Mortality Counts: MB
			Temp. (°C)	22.0	48A	PM Change: MB PM Feed: MB
7	6/11/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.6	RD12	AM Change: RB WQ: RB
			New D.O. (mg/L)	8.1	RD12	Mortality Counts: RB
			Temp. (°C)	22.2	48A	PM Change: SH PM Feed: SH
8	6/12/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	3.8	RD11	AM Change: YU WQ: YU
			New D.O. (mg/L)	8.6	RD11	Mortality Counts: YU
			Temp. (°C)	22.2	48A	PM Change: YU PM Feed: YU
9	6/13/17	# of Mortalities: A 0 B 0 C 0 D 0 / E 0 F 0 G 0 H 0	Old D.O. (mg/L)	5.2	RD11	AM Change: SB WQ: SB
			New D.O. (mg/L)	7.8	RD11	Mortality Counts: SB
			Temp. (°C)	22.2	48A	PM Change: YU PM Feed: YU
10	6/14/17	# Alive: A 5 B 3 C 3 D 5 / E 4 F 8 G 7 H 4	pH	7.39	PH21	WQ: YU
			D.O. (mg/L)	4.3	RD11	Termination Counts: 6/14/17 DM 1340 DM
			Conductivity (µS/cm)	459	EC08	Termination Time: 1340
			Alkalinity (mg/L)	V74		
			Hardness (mg/L)	V159		
			Ammonia (mg/L)	<1.00	DR3800	
			Temp. (°C)	22.2	48A	

Hyalella azteca Weight Data Sheets

Client: **Condor Earth: Stockton Stormwater** Project #: **27494** Balance ID: 04

Sample ID: **CR-46RPP** Tare Wt Date: 6-9-17 Sign-Off: MC

Test ID #: **73187** Final Wt Date: 6/15/17 Sign-Off: RB

Pan	Concentration	Replicate	Initial Weight. (mg)	Final Weight. (mg)	# organisms	Ave Weight (mg)
1	Control	A	60.59	62.48	10 ~~5~~ 4 HH/17 DM	0.189
2	Sediment	B	60.88	62.70	10 3 4 HH/17 DM	0.182
3		C	59.77	61.74	10 ~~5~~ 4 HH/17 DM	0.197
4		D	57.65	59.53	10 5 4 HH/17 DM	0.188
5		E	58.30	60.70	10	0.190
6		F	60.66	63.10	10	0.244
7		G	60.84	63.02	10	0.218
8		H	59.65	61.91	10	0.226
9	CR-46RPP	A	60.84	61.71	5	0.174
10		B	60.26	60.79	3	0.1767
11		C	54.89	55.66	3	0.2567
12		D	56.75	57.86	5	0.222
13		E	56.50	57.32	4	0.205
14		F	57.57	58.55	8	0.1225
15		G	60.62	61.55	7	0.1329
16		H	56.95	57.80	4	0.2125
QA1			~~Bal 04~~ 60.32	60.32		

Appendix E
2016-2017 Water Column Toxicity Results

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Water Column Toxicity Lab Report
October 14, 2016 at CR-46R
During Storm Event

Micheline Kipf
Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

November 17, 2016

Micheline:

I have enclosed our report "An Evaluation of the Chronic Toxicity of City of Stockton Stormwater Program Ambient Water Samples" for testing performed on the ambient water samples collected on October 14, 2016. The results of this testing are summarized below:

Toxicity summary for Stockton Stormwater Program ambient water sample.				
Sample ID	Toxicity relative to the Lab Control treatment?			
	Ceriodaphnia dubia		Fathead Minnow	
	Survival	Reproduction	Survival	Growth
CR-46R	no	**YES**	no	no
FD	no	**YES**	no	no

Chronic Toxicity of Urban Ambient Waters to *Ceriodaphnia dubia*
There were no significant reductions in *C. dubia* survival in any of the ambient water samples. There were significant reductions in reproduction in the CR-46R and FD samples.

Chronic Toxicity of Urban Ambient Waters to Fathead Minnows
There were no significant reductions in fathead minnow survival or growth in any of the ambient water samples.

If you have any questions regarding the performance and interpretation of these tests, please contact my colleague Stephen Clark or myself at (707) 207-7760.

Sincerely,

Michael McElroy
Senior Aquatic Ecotoxicologist

An Evaluation of the Chronic Toxicity of City of Stockton Stormwater Program Ambient Water Samples

Samples collected October 14, 2016

Prepared For

Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

Prepared By

Pacific EcoRisk
2250 Cordelia Rd.
Fairfield, CA 94534
(707) 207-7760

November 2016

PACIFIC ECORISK
ENVIRONMENTAL CONSULTING & TESTING

An Evaluation of the Chronic Toxicity of City of Stockton Stormwater Program Ambient Water Samples

Samples collected October 14, 2016

Table of Contents

Appendices

1. INTRODUCTION

In compliance with City of Stockton Stormwater Program NPDES permit monitoring requirements, Condor Earth Technologies, Inc., has contracted Pacific EcoRisk (PER) to evaluate the chronic toxicity of selected ambient water samples. These evaluations consist of performing the following US EPA freshwater chronic toxicity tests:

- 3-brood (6-8 day) survival and reproduction test with the crustacean *Ceriodaphnia dubia*; and
- 7-day survival and growth test with larval fathead minnows (*Pimephales promelas*).

The current evaluation was performed using ambient water samples collected on October 14, 2016. This report describes the performance and results of these tests.

2. CHRONIC TOXICITY TEST PROCEDURES

This testing followed the guidelines established by the EPA manual "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition" (EPA-821-R-02-013).

2.1 Receipt and Handling of the Ambient Water Sample

On October 14, an ambient water sample was collected into appropriately cleaned sample containers; a field duplicate sample was collected at this same time. The samples were transported and delivered the following day, on ice and under chain-of-custody, to the PER laboratory in Fairfield, CA. Upon receipt at the testing laboratory, an aliquot of each sample was collected for analysis of initial water quality characteristics (Table 1). The samples were then stored at ≤6˚C, except when being used to prepare test solutions. The chain-of-custody record for the collection and delivery of these samples is presented in Appendix A.

Table 1. Initial water quality characteristics of the Stockton Stormwater Program ambient water samples.

Sample Receipt Date	Sample ID	Temp. (°C)	pH	D.O. (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Conductivity (µS/cm)	Total Ammonia (mg/L N)
10/15/16	CR-46R	1.6	7.69	9.5	58	133	233	1.84
10/15/16	FD	6.2*	7.62	9.2	50	130	213	1.58

* Sample was shipped on ice and arrived at PER <24 hrs from sample collection.

2.2 Survival and Reproduction Toxicity Testing with *Ceriodaphnia dubia*

The chronic toxicity test with *C. dubia* consists of exposing neonate organisms to the ambient water for the length of time it takes for the Control treatment females to produce three broods (typically 6-8 days), after which effects on survival and reproduction are evaluated. The specific procedures used in this test are described below.

The Lab Water Control medium for this testing consisted of synthetic reconstituted freshwater (SRW adjusted to EPA moderately-hard hardness), prepared by addition of reagent-grade chemicals to Type 1 lab water. The ambient water sample and field duplicate were tested at the 100% concentration only. For each test treatment, a 200 mL aliquot of test solution was amended with the alga *S. capricornutum* and Yeast-Cerophyll®-Trout Food (YCT) to provide food for the test organisms. "New" water quality characteristics (pH, D.O., and conductivity) were measured on these food-amended test solutions prior to use in this testing.

There were 10 replicates for each test treatment, each replicate consisting of 15 mL of test solution in a 30-mL plastic cup. The tests were initiated by allocating one neonate (<24 hours old, and within 8-hours of age) *C. dubia*, obtained from in-house laboratory cultures, into each replicate cup. The test replicate cups were placed into a temperature-controlled room at 25˚C, under cool white fluorescent lighting on a 16L:8D photoperiod.

Each day of the test, fresh test solutions were prepared and characterized as before, and a new set of replicate cups were prepared. The test replicates containing the test organisms were examined, with surviving organisms being transferred to the corresponding new replicate cup. The contents of each of the remaining old replicate cups was carefully examined and the number of neonate offspring produced by each parent organism was determined, after which the "old" water quality characteristics (pH, D.O., and conductivity) were measured for the old test solution from one randomly-selected replicate at each treatment.

After it was determined that ≥60% of the *C. dubia* in the Lab Water Control treatment had produced their third brood of offspring, the tests were terminated. The resulting survival and reproduction data were analyzed to evaluate any impairment caused by the ambient waters. All statistical analyses were performed using the CETIS statistical software (TidePool Scientific, McKinleyville, CA).

2.3 Survival and Growth Toxicity Testing with Larval Fathead Minnows

The chronic toxicity test with fathead minnows consists of exposing larval fish to the ambient water for seven days, after which effects on survival and growth are evaluated. The specific procedures used in this test are described below.

Pathogen-related mortality (PRM) in chronic fathead minnow toxicity tests of ambient or ponded waters is a common confounding problem that must be controlled in order to determine the toxicity of sample waters. The US EPA has recognized this problem, and has recommended a variety of potential modifications to the testing approach that can be implemented to minimize PRM interference. The approach used in this study, described below, has the advantage of minimizing the PRM interference without affecting the water sample matrix.

The larval fathead minnows used in this testing were obtained from a commercial supplier (Aquatox, Hot Springs, AR); upon receipt at the lab, the fish were held in aerated tanks containing Lab Water Control medium, and were fed brine shrimp nauplii *ad libitum* during this pre-test holding period.

The Lab Water Control medium for this testing consisted of EPA synthetic moderately-hard water. The ambient water samples were tested at the 100% concentration only. "New" water quality characteristics (pH, D.O., and conductivity) were measured on these test solutions prior to use in the tests.

There were 10 replicates for each test treatment, each replicate consisting of 20 mL of test solution in a 30-mL test replicate container. The tests were initiated by randomly allocating two larval fathead minnows (<48 hrs old) into each replicate. The replicate containers were then placed in a temperature-controlled room at 25°C, under fluorescent lighting on a 16L:8D photoperiod. The test fish were fed brine shrimp nauplii twice daily.

Each day of the tests, fresh test solutions were prepared and characterized as before. The test replicate containers were examined, with any dead animals, uneaten food, wastes, and other detritus being removed. The number of live fish in each replicate was determined and then approximately 80% of the old test solution in each beaker was carefully poured out and replaced with fresh test solution. "Old" water quality characteristics (pH, D.O., and conductivity) were measured on the old test solution that had been discarded from one randomly-selected replicate at each treatment.

After seven days exposure, the tests were terminated and the number of live fish in each replicate was recorded. The fish from each replicate were carefully euthanized in methanol, rinsed in de-ionized water, and transferred to a pre-dried and pre-tared weighing pan; replicates were paired to obtain five composite replicates for each test treatment. The fish were then dried at 100˚C for ≥24 hrs and re-weighed to determine the total dry weight of fish in each replicate; the total dry weight was then divided by the initial number of fish per composited replicate (n=4) to determine the "biomass value." The resulting survival and growth (biomass value) data were analyzed to evaluate any impairments caused by the ambient waters; all statistical analyses were performed using the CETIS® statistical software.

3. RESULTS

3.1 Effects of Stockton Stormwater Samples on *Ceriodaphnia dubia*

The results of these tests are summarized below in Table 2. There were no significant reductions in *C. dubia* survival in any of the ambient water samples. There were significant reductions in reproduction in the CR-46R and FD samples. The test data and summary of statistical analyses for this testing are presented in Appendix B.

Table 2. Effects of Stockton stormwater sample on *Ceriodaphnia dubia* survival and reproduction.

Treatment/Sample ID	Mean % Survival	Mean Reproduction (# neonates/female)
Lab Control	100	33.8
CR-46R	100	**14.6***
FD	100	**19.5***

* The response at this test treatment was significantly less than the Lab Water Control treatment response ($p < 0.05$).

3.2 Effects of Stockton Stormwater Samples on Fathead Minnows

The results of these tests are summarized below in Table 3. There were no significant reductions in survival or growth in any of the ambient water samples. The test data and summary of statistical analyses for this testing are presented in Appendix C.

Table 3. Effects of Stockton stormwater sample on fathead minnow survival and growth.

Treatment/Sample ID	Mean % Survival	Mean Biomass Value (mg)
Lab Control	95	0.32
CR-46R	95	0.36
FD	70	0.25

4. SUMMARY AND CONCLUSIONS

Chronic Toxicity of Urban Ambient Waters to *Ceriodaphnia dubia*
There were no significant reductions in *C. dubia* survival in any of the ambient water samples. There were significant reductions in reproduction in the CR-46R and FD samples.

Chronic Toxicity of Urban Ambient Waters to Fathead Minnows
There were no significant reductions in fathead minnow survival or growth in any of the ambient water samples.

4.1 QA/QC Summary

Test Conditions – All test conditions (pH, D.O., temperature, etc.) were within acceptable limits for this testing. All test analyses were performed according to laboratory Standard Operating Procedures.

Negative Control –The biological responses at the Lab Control treatments were within acceptable limits.

Appendix A

Chain-of-Custody Record for the Collection and Delivery of the Stockton Stormwater Program Ambient Water Samples

CHAIN-OF-CUSTODY

16946

Sample Results TAT: ☐ Rush ☒ Standard 10 Day (discount)

Condor Earth Technologies, Inc.

☐ P.O. Box 3905/21663 Brian Lane, Sonora, CA 95370, 209.532.0361, 209.532.0773 (fax), condor.sonora@condorearth.com

☒ 188 Frank West Circle, Suite I, Stockton, CA 95206, 209.234.0518, 209.234.0538 (fax), condor.stockton@condorearth.com

☐ 1739 Ashby Road, Suite B, Merced, CA 95348, 209.388.9601, 209.388.1778 (fax), condor.merced@condorearth.com

SHIPPED TO:

Pacific Eco Risk (707)207-7760
2250 Cordelia Rd, Fairfield CA 94534

SEND RESULTS TO:

NAME: Michelle Kipf
E-MAIL: mkipf@condorearth.com

☒ PLEASE E-MAIL (preferred) / OR FAX RESULTS TO ADDRESS MARKED ABOVE

PROJECT NAME/LOCATION: COS Urban Discharge

EDF RESULTS REQUIRED YES (NO)

SITE GLOBAL ID:

PROJECT NO.: 6066J-04-01

SAMPLED BY: (Signature)

Date	Time	Sample Site Name	Sample ID (if different)	Matrix	# of containers	Preservatives (see below)	ANALYSIS/METHOD: Field Filtered	Chronic Ceriodaphnia	Chronic Fathead minnow	REMARKS	LAB ID #
10/14/16	1645	CR-46R		SW	2	1	N	X	X	chronic ceriodaphnia	
10/14/16	1730	FD		SW	2	1	N	X	X	toxicity	
										chronic fathead minnow	
										follow-up dilution series	
										as necessary (100% mortality	
										in 24 hrs)	
										chronic toxicity (Phase I	
										targeted) TIE as necessary	
										Contact PM prior (≥50%	
										mortality / reproduction)	
										This COC replaces incorrect	
										COC No 16613 previously	
										filled out	

Relinquished By: (Signature)	Date:	Time:	Received By: (Signature)	Date:	Time:
	10/15/16	10:00	PER	10/15/16	10:00
Relinquished By: (Signature)			Received By: (Signature)		

Matrix: (DW) Drinking Water; (WW) Waste Water; (HWW) Hazardous Waste (Water); (S) Soil/Solid; (SW) Storm Water; (GW) Groundwater

Preservative: (1) 4°C (2) HCL (3) NaOH (4) $Na_2S_2O_3$ (5) HNO_3 (6) H_2SO_4 (7) Other

Original - Send Yellow - File Pink - Log Book

Appendix B

Test Data and Summary of Statistics for the Evaluation of the Chronic Toxicity of Stockton Stormwater Program Ambient Water Samples to *Ceriodaphnia dubia*

CETIS Summary Report

Ceriodaphnia Survival and Reproduction Test — **Pacific EcoRisk**

Batch ID:	07-0331-2755	**Test Type:**	Reproduction-Survival (7d)	**Analyst:**	Robert Gee
Start Date:	15 Oct-16 16:00	**Protocol:**	EPA-821-R-02-013 (2002)	**Diluent:**	Not Applicable
Ending Date:	21 Oct-16 15:05	**Species:**	Ceriodaphnia dubia	**Brine:**	Not Applicable
Duration:	5d 23h	**Source:**	In-House Culture	**Age:**	1

Sample Code	Sample ID	Sample Date	Receive Date	Sample Age	Client Name	Project
CE_1016CD_C1	09-0712-7458	15 Oct-16 16:00	15 Oct-16 16:00	NA (25.6 °C)	Condor Earth Technologies	26442
CR-46R	18-8541-8335	14 Oct-16 16:45	15 Oct-16 10:00	23h (1.6 °C)		
Field Duplicate	07-8261-4773	14 Oct-16 17:30	15 Oct-16 10:00	22h (6.2 °C)		

Sample Code	Material Type	Sample Source	Station Location	Latitude	Longitude
CE_1016CD_C1	Ambient Water	Condor Earth Technologies	LABQA		
CR-46R	Ambient Water	Condor Earth Technologies	CR-46R		
Field Duplicate	Ambient Water	Condor Earth Technologies	Field Duplicate		

Reproduction Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_1016CD_C1	10	33.8	30.9	36.7	27	39	1.29	4.08	12.1%	0.0%
CR-46R	10	14.6	11.2	18	9	22	1.51	4.79	32.8%	56.8%
Field Duplicate	10	19.5	15.8	23.2	12	27	1.63	5.17	26.5%	42.3%

Survival Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_1016CD_C1	10	1	1	1	1	1	0	0	0.0%	0.0%
CR-46R	10	1	1	1	1	1	0	0	0.0%	0.0%
Field Duplicate	10	1	1	1	1	1	0	0	0.0%	0.0%

Reproduction Detail

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_1016CD_C1	36	27	38	32	35	29	35	39	37	30
CR-46R	13	22	19	9	13	22	10	12	11	15
Field Duplicate	23	22	14	21	20	24	20	12	27	12

Survival Detail

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_1016CD_C1	1	1	1	1	1	1	1	1	1	1
CR-46R	1	1	1	1	1	1	1	1	1	1
Field Duplicate	1	1	1	1	1	1	1	1	1	1

Survival Binomials

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_1016CD_C1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
CR-46R	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Field Duplicate	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1

Ceriodaphnia Survival and Reproduction Test — Pacific EcoRisk

Analysis ID:	18-0110-9979	**Endpoint:**	Survival	**CETIS Version:**	CETISv1.8.7
Analyzed:	25 Oct-16 9:22	**Analysis:**	Single 2x2 Contingency Table	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	Test Result
Untransformed		C > T	NA	NA	

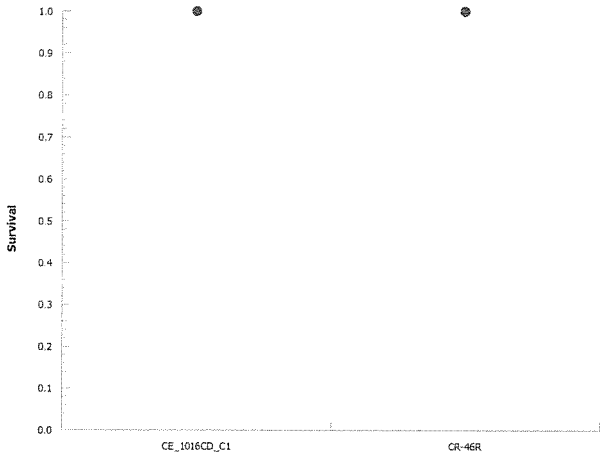
Fisher Exact Test

Sample	vs	Sample	Test Stat	P-Value	P-Type	Decision(α:5%)
CE_1016CD_C1		CR-46R	1	1.0000	Exact	Non-Significant Effect

Data Summary

Sample Code	NR	R	NR + R	Prop NR	Prop R	%Effect
CE_1016CD_C1	lab Water Cont 10	0	10	1	0	0.0%
CR-46R	10	0	10	1	0	0.0%

Graphics



Ceriodaphnia Survival and Reproduction Test — Pacific EcoRisk

Analysis ID:	10-3306-8436	**Endpoint:**	Reproduction	**CETIS Version:**	CETISv1.8.7
Analyzed:	25 Oct-16 9:22	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Untransformed	NA	C > T	NA	NA	10.2%	

Equal Variance t Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
CE_1016CD_C1		CR-46R	9.65	1.73	3.45	18	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1843.2	1843.2	1	93.2	<0.0001	Significant Effect
Error	356	19.77778	18			
Total	2199.2		19			

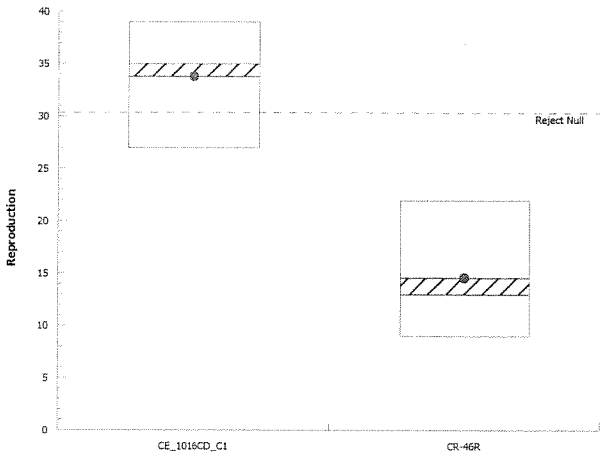
Distributional Tests

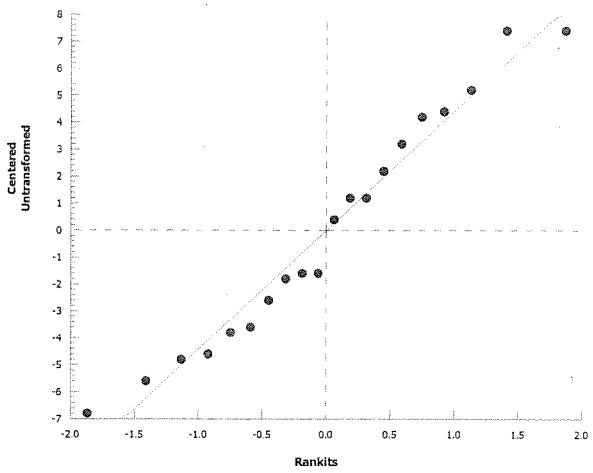
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	1.38	6.54	0.6394	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.955	0.866	0.4535	Normal Distribution

Reproduction Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016CD_C1	10	33.8	30.9	36.7	35	27	39	1.29	12.1%	0.0%
CR-46R	10	14.6	11.2	18	13	9	22	1.51	32.8%	56.8%

Graphics





Short-Term Chronic 3-Brood *Ceriodaphnia dubia* Survival & Reproduction Test Data

Client: **Condor Earth - Stockton** Material: **CR-46R** Test Date: 10/15/16

Project #: 26442 Test ID: 70027 Randomization 10-T-9 Control Water: SRW

Lab Water Control

Day	pH New	pH Old	D.O. New	D.O. Old	Cond. (µS/cm)	Temp (°C)	A	B	C	D	E	F	G	H	I	J	SIGN-OFF
0	7.68		8.2		312	25.6	0	0	0	0	0	0	0	0	0	0	Date: 10/15/16 New WQ: Test Init: BV Sol'n Prep: EP SD Time: 1600
1	8.16	7.74	8.0	7.0	~~349~~ 330	25.7	0	0	0	0	0	0	0	0	0	0	Date: 10/16/16 New WQ: TA Counts: BV Sol'n Prep: BV Old WQ: TA Time: 1235
2	7.63	8.00	8.5	7.3	328	25.5	0	0	0	0	0	0	0	0	0	0	Date: 10/17/16 New WQ: JJ Counts: SH Sol'n Prep: TK Old WQ: TA Time: 1220
3	7.81	7.56	8.6	6.2	323	24.9	0	0	0	1	0	0	0	0	0	0	Date: 10/18/16 New WQ: SJB Counts: JO Sol'n Prep: MAM Old WQ: SJB Time: 1330
4	7.59	8.00	8.8	7.4	319	25.0	7	5	7	2	8	7	7	8	8	6	Date: 10/19/16 New WQ: SJB Counts: BV Sol'n Prep: DM Old WQ: BV Time: 1345
5	7.87	7.58	7.9	6.9	325	25.0	14	10	15	13	13	10	12	13	12	10	Date: 10/20/16 New WQ: SH Counts: SH Sol'n Prep: TK Old WQ: JJ Time: 1350
6	—	7.63	—	8.0	343	24.8	15	12	16	16	14	12	16	18	17	14	Date: 10/21/16 New WQ: — Counts: JO Sol'n Prep: — Old WQ: SD Time: 1505
7																	Date: New WQ: Counts: Sol'n Prep: Old WQ: Time:
8																	Date: Old WQ: Counts: Time:
						Total=	36	27	38	32	35	29	35	39	37	30	Mean Neonates/Female = 33.8

100%

Day	pH New	pH Old	D.O. New	D.O. Old	Cond. (µS/cm)	A	B	C	D	E	F	G	H	I	J	SAMPLE ID
0	7.79		9.7		~~282~~ 217	0	0	0	0	0	0	0	0	0	0	44321 EP 10/15/16
1	8.00	7.73	8.0	4.5	253	0	0	0	0	0	0	0	0	0	0	BV 10/16/16 ~~44322~~ 44321
2	7.66	7.99	8.6	7.0	252	0	0	0	0	0	0	0	0	0	0	44321
3	7.89	7.61	8.6	4.1	245	0	0	0	0	0	0	0	0	0	0	44321
4	7.53	7.60	7.0	6.2	255	0	3	4	4	5	3	4	4	4	2	44321
5	7.34	7.53	8.1	5.6	257	5	10	9	0	0	9	0	0	0	6	44321
6	—	7.56	—	7.0	259	8	9	6	5	8	10	6	8	7	7	—
7																
8																
						Total=	13	22	19	9	13	22	10	12	11	15	Mean Neonates/Female = 14.6

Ceriodaphnia Survival and Reproduction Test — **Pacific EcoRisk**

Analysis ID:	11-1845-2396	**Endpoint:**	Survival	**CETIS Version:**	CETISv1.8.7
Analyzed:	25 Oct-16 9:22	**Analysis:**	Single 2x2 Contingency Table	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	Test Result
Untransformed		C > T	NA	NA	

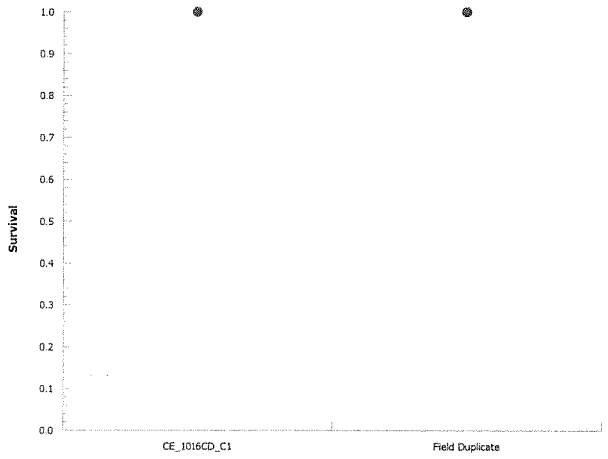
Fisher Exact Test

Sample	vs	Sample	Test Stat	P-Value	P-Type	Decision(α:5%)
CE_1016CD_C1		Field Duplicate	1	1.0000	Exact	Non-Significant Effect

Data Summary

Sample Code	NR	R	NR + R	Prop NR	Prop R	%Effect
CE_1016CD_C1lab Water Cont	10	0	10	1	0	0.0%
Field Duplicate	10	0	10	1	0	0.0%

Graphics



Ceriodaphnia Survival and Reproduction Test — Pacific EcoRisk

Analysis ID: 08-5090-5279 Endpoint: Reproduction CETIS Version: CETISv1.8.7
Analyzed: 25 Oct-16 9:22 Analysis: Parametric-Two Sample Official Results: Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Untransformed	NA	C > T	NA	NA	10.7%	

Equal Variance t Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
CE_1016CD_C1		Field Duplicate	6.87	1.73	3.61	18	<0.0001	CDF	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1022.45	1022.45	1	47.2	<0.0001	Significant Effect
Error	390.1	21.67222	18			
Total	1412.55		19			

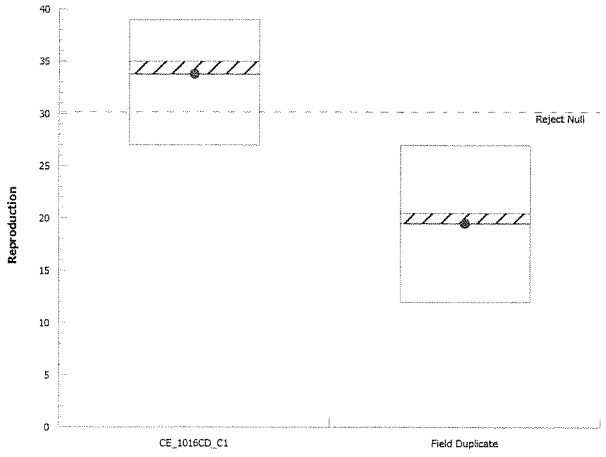
Distributional Tests

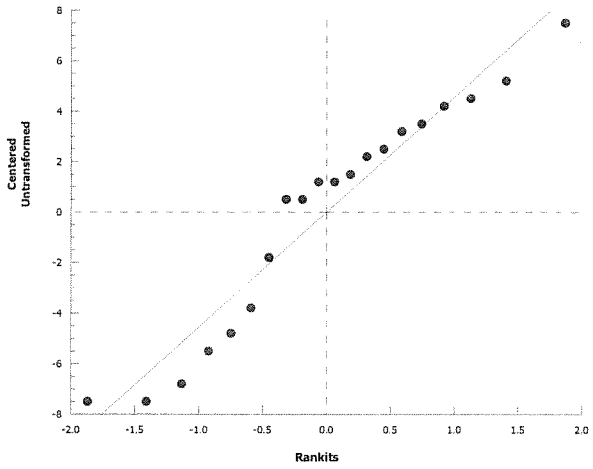
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	1.61	6.54	0.4905	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.928	0.866	0.1439	Normal Distribution

Reproduction Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016CD_C1	10	33.8	30.9	36.7	35	27	39	1.29	12.1%	0.0%
Field Duplicate	10	19.5	15.8	23.2	20.5	12	27	1.63	26.5%	42.3%

Graphics





Short-Term Chronic 3-Brood *Ceriodaphnia dubia* Survival & Reproduction Test Data

Client: **Condor Earth - Stockton** Material: **Field Duplicate** Test Date: 10/15/16

Project #: 26442 Test ID: 70028 Randomization BV 10/15/16 10/15/16 10:5:9 Control Water: SRW

Lab Water Control

Day	pH New	pH Old	D.O. New	D.O. Old	Cond. (µS/cm)	Temp (°C)	Survival / Reproduction A	B	C	D	E	F	G	H	I	J	SIGN-OFF
0	7.68		8.2		312	25.6	0	0	0	0	0	0	0	0	0	0	Date: 10/15/16 New WQ: SD Test Init: BV Sol'n Prep: EP Time: 1600
1	8.16	7.74	8.0	7.0	330	25.7	0	0	0	0	0	0	0	0	0	0	Date: 10/16/16 New WQ: TA Counts: BV Sol'n Prep: BV Old WQ: TA Time: 1235
2	7.63	8.00	8.5	7.3	328	25.5	0	0	0	0	0	0	0	0	0	0	Date: 10/17/16 New WQ: JJ Counts: SH Sol'n Prep: TK Old WQ: TA Time: 1220
3	7.91	7.56	8.6	6.2	323	24.9	0	0	0	1	0	0	0	0	0	0	Date: 10/18/16 New WQ: SJB Counts: JO Sol'n Prep: MDM Old WQ: SJB Time: 1330
4	7.59	8.00	8.8	7.4	319	25.0	7	5	7	2	8	7	7	8	8	6	Date: 10/19/16 New WQ: SJB Counts: BV Sol'n Prep: DM Old WQ: BV Time: 1345
5	7.87	7.58	7.9	6.9	325	25.0	14	10	15	13	13	10	12	13	12	10	Date: 10/20/16 New WQ: SH Counts: SH Sol'n Prep: TK Old WQ: JJ Time: 1350
6	—	7.63	—	8.0	343	24.8	15	12	16	16	14	12	16	18	17	14	Date: 10/21/16 New WQ: — Counts: JO Sol'n Prep: — Old WQ: SD Time: 1505
7																	Date: New WQ: Counts: Sol'n Prep: Old WQ: Time:
8																	Date: Old WQ: Counts: Time:
						Total=	36	27	38	32	35	29	35	39	37	30	Mean Neonates/Female = 33.8

100%

Day	pH New	pH Old	D.O. New	D.O. Old	Cond. (µS/cm)	Survival / Reproduction A	B	C	D	E	F	G	H	I	J	SAMPLE ID
0	7.78		9.4		220	0	0	0	0	0	0	0	0	0	0	44322
1	8.01	7.59	6.2	5.1	220	0	0	0	0	0	0	0	0	0	0	44322
2	7.58	7.91	6.9	6.8	225	0	0	0	0	0	0	0	0	0	0	44322
3	7.77	7.60	6.8	4.6	216	0	0	0	0	0	0	0	0	0	0	44322
4	7.41	7.64	5.4	6.2	219	5	4	3	4	2	5	3	3	4	5	44322
5	7.25	7.44	7.8	5.0	212	9	8	6	9	9	10	8	9	11	7	44322
6	—	7.54	—	7.0	244	9	10	5	8	9	9	9	0	12	0	—
7																
8																
						Total=	23	22	14	21	20	24	20	12	27	12	Mean Neonates/Female = 19.5

Appendix C

Test Data and Summary of Statistics for the Evaluation of the Chronic Toxicity of Stockton Stormwater Program Ambient Water Samples to Fathead Minnows

CETIS Summary Report

Chronic Larval Fish Survival and Growth Test — **Pacific EcoRisk**

Batch ID:	12-6989-5835	**Test Type:**	Growth-Survival (7d)	**Analyst:**	Robert Gee
Start Date:	15 Oct-16 16:35	**Protocol:**	EPA-821-R-02-013 (2002)	**Diluent:**	Not Applicable
Ending Date:	22 Oct-16 08:20	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	6d 16h	**Source:**	Aquatox, AR	**Age:**	1

Sample Code	Sample ID	Sample Date	Receive Date	Sample Age	Client Name	Project
CE_1016PP_C1	15-6405-0007	15 Oct-16 16:35	15 Oct-16 16:35	NA (25.8 °C)	Condor Earth Technologies	26442
CR-46R	18-8541-8335	14 Oct-16 16:45	15 Oct-16 10:00	24h (1.6 °C)		
Field Duplicate	07-8261-4773	14 Oct-16 17:30	15 Oct-16 10:00	23h (6.2 °C)		

Sample Code	Material Type	Sample Source	Station Location	Latitude	Longitude
CE_1016PP_C1	Ambient Water	Condor Earth Technologies	LABQA		
CR-46R	Ambient Water	Condor Earth Technologies	CR-46R		
Field Duplicate	Ambient Water	Condor Earth Technologies	Field Duplicate		

7d Survival Rate Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_1016PP_C1	10	0.95	0.837	1	0.5	1	0.05	0.158	16.6%	0.0%
CR-46R	10	0.95	0.837	1	0.5	1	0.05	0.158	16.6%	0.0%
Field Duplicate	10	0.7	0.398	1	0	1	0.133	0.422	60.2%	26.3%

7d Survival Rate Detail

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_1016PP_C1	1	1	1	1	1	1	1	1	1	0.5
CR-46R	1	1	1	1	1	0.5	1	1	1	1
Field Duplicate	1	0.5	0	1	1	1	1	0	1	0.5

7d Survival Rate Binomials

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_1016PP_C1	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	1/2
CR-46R	2/2	2/2	2/2	2/2	2/2	1/2	2/2	2/2	2/2	2/2
Field Duplicate	2/2	1/2	0/2	2/2	2/2	2/2	2/2	0/2	2/2	1/2

Chronic Larval Fish Survival and Growth Test — **Pacific EcoRisk**

Batch ID:	17-5373-5594	**Test Type:**	Growth-Survival (7d)	**Analyst:**	Robert Gee
Start Date:	15 Oct-16 16:35	**Protocol:**	EPA-821-R-02-013 (2002)	**Diluent:**	Not Applicable
Ending Date:	22 Oct-16 08:20	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	6d 16h	**Source:**	Aquatox, AR	**Age:**	1

Sample Code	Sample ID	Sample Date	Receive Date	Sample Age	Client Name	Project
CE_1016PP_C1w	16-2431-9820	15 Oct-16 16:35	15 Oct-16 16:35	NA (25.8 °C)	Condor Earth Technologies	26442
CR-46R	18-8541-8335	14 Oct-16 16:45	15 Oct-16 10:00	24h (1.6 °C)		
Field Duplicate	07-8261-4773	14 Oct-16 17:30	15 Oct-16 10:00	23h (6.2 °C)		

Sample Code	Material Type	Sample Source	Station Location	Latitude	Longitude
CE_1016PP_C1w	Ambient Water	Condor Earth Technologies	LABQA		
CR-46R	Ambient Water	Condor Earth Technologies	CR-46R		
Field Duplicate	Ambient Water	Condor Earth Technologies	Field Duplicate		

Mean Dry Biomass-mg Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_1016PP_C1w	5	0.324	0.244	0.404	0.235	0.408	0.0289	0.0646	19.9%	0.0%
CR-46R	5	0.362	0.309	0.415	0.29	0.405	0.0192	0.0428	11.8%	-11.7%
Field Duplicate	5	0.249	0.113	0.384	0.1	0.34	0.0487	0.109	43.8%	23.3%

Mean Dry Biomass-mg Detail

Sample Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
CE_1016PP_C1w	0.35	0.408	0.292	0.335	0.235
CR-46R	0.368	0.375	0.29	0.405	0.372
Field Duplicate	0.34	0.165	0.313	0.1	0.325

Chronic Larval Fish Survival and Growth Test — **Pacific EcoRisk**

Analysis ID:	06-9096-3438	**Endpoint:**	7d Survival Rate	**CETIS Version:**	CETISv1.8.7
Analyzed:	25 Oct-16 10:00	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Angular (Corrected)	NA	C > T	NA	NA	19.6%	

Wilcoxon Rank Sum Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
CE_1016PP_C1		CR-46R	105	NA	2	18	0.7632	Exact	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	3.552714E-15	3.552714E-15	1	1.98E-13	1.0000	Non-Significant Effect
Error	0.3236442	0.01798023	18			
Total	0.3236442		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	1	6.54	1.0000	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.351	0.866	<0.0001	Non-normal Distribution

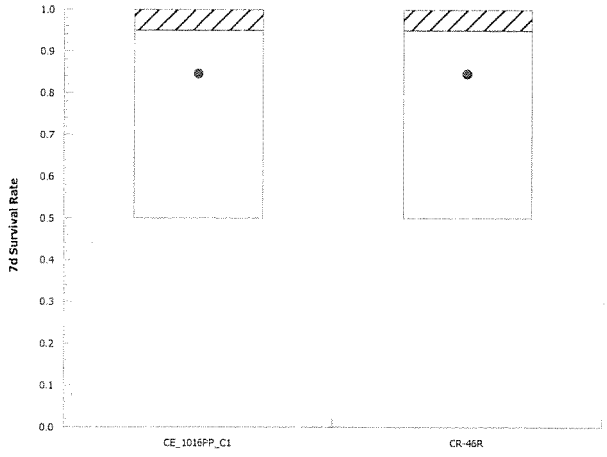
7d Survival Rate Summary

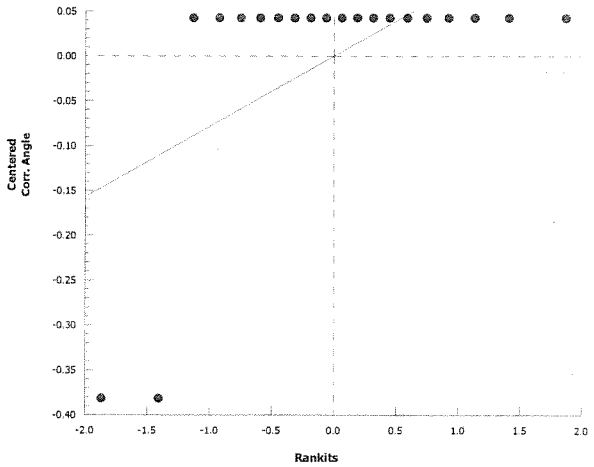
Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016PP_C1	10	0.95	0.837	1	1	0.5	1	0.05	16.6%	0.0%
CR-46R	10	0.95	0.837	1	1	0.5	1	0.05	16.6%	0.0%

Angular (Corrected) Transformed Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016PP_C1	10	1.17	1.07	1.26	1.21	0.785	1.21	0.0424	11.5%	0.0%
CR-46R	10	1.17	1.07	1.26	1.21	0.785	1.21	0.0424	11.5%	0.0%

Graphics





7 Day Chronic Fathead Minnow Toxicity Test Data

Client: **Condor Earth - Stockton** Organism Log#: 9855 Age: <48hrs

Test Material: **CR-46 R** Organism Supplier: Aquatox

Test ID#: 70029 Project #: 26442 Control/Diluent: EPAMH

Test Date: 10/15/16 Control Water Batch: 1925

	Treatment (%)	Temp (°C)	pH New	pH Old	D.O. (mg/L) New	D.O. (mg/L) Old	Conductivity (µS/cm)	# Live Organisms A	B	C	D	E	F	G	H	I	J
Day 0	Control	25.8	7.85		8.2		298	2	2	2	2	2	2	2	2	2	2
	100	25.8	7.93		9.7		213	2	2	2	2	2	2	2	2	2	2
	Meter ID	31A	PH23		RD11		EC09										
	Date: 10/15/16	Sample ID: ~~EP 10/15/16~~ 44321	Test Solution Prep: EP		New WQ: SD												
								Initiation Time: 1635							Initiation Sign-off: TK		
Day 1	Control	25.7	8.11	7.78	8.5	7.0	298	2	2	2	2	2	2	2	2	2	2
	100	25.7	7.85	7.60	8.0	2.8	219	2	2	2	2	2	1	2	2	2	2
	Meter ID	31A	PH23	PH23	RD09	RD09	EC09										
	Date: 10/16/16	Sample ID: 44321	Test Solution Prep: BV		New WQ: JL	Old WQ: EP											
								Renewal Time: 1530							Renewal Sign-off: BV		
Day 2	Control	25.8	7.93	7.76	8.8	7.8	317	2	2	2	2	2	2	2	2	2	2
	100	25.8	7.78	7.77	9.0	6.8	255	2	2	2	2	2	1	2	2	2	2
	Meter ID	31A	PH23	PH15	RD09	RD10	EC04										
	Date: 10/17/16	Sample ID: 44321	Test Solution Prep: TK		New WQ: JL	Old WQ: JA											
								Renewal Time: 1025							Renewal Sign-off: SH		
Day 3	Control	25.1	7.67	7.55	8.3	5.5	300	2	2	2	2	2	2	2	2	2	1
	100	25.1	7.71	7.57	9.1	5.6	246	2	2	2	2	2	1	2	2	2	2
	Meter ID	31A	PH23	PH21	RD10	RD11	EC11										
	Date: 10/18/16	Sample ID: 44321	Test Solution Prep: MM		New WQ: SJB	Old WQ: SJB											
								Renewal Time: 1319							Renewal Sign-off: RG		
Day 4	Control	25.3	7.54	7.43	8.4	8.1	304	2	2	2	2	2	2	2	2	2	1
	100	25.3	7.35	N/M	6.1	N/M	251	2	2	2	2	2	1	2	2	2	2
	Meter ID	31A	PH21	PH23	RD11	RD10	EC09										
	Date: 10/19/16	Sample ID: 44321	Test Solution Prep: DM		New WQ: JL	Old WQ: SJB											
								Renewal Time: 1240							Renewal Sign-off: BV		
Day 5	Control	24.7	7.25	7.64	8.7	6.7	304	2	2	2	2	2	2	2	2	2	1
	100	24.7	7.23	7.40	~~4.5~~ 8.5 10/22/16 PM	5.5	243	2	2	2	2	2	1	2	2	2	2
	Meter ID	31A	PH21	PH 23	RD10	RD09	EC10										
	Date: 10/20/16	Sample ID: 44321	Test Solution Prep: TK		New WQ: SJB	Old WQ: JJ											
								Renewal Time: 1540							Renewal Sign-off: DM		
Day 6	Control	24.9	7.79	7.75	8.9	7.1	294	2	2	2	2	2	2	2	2	2	1
	100	24.9	7.69	7.72	7.9	7.3	248	2	2	2	2	2	1	2	2	2	2
	Meter ID	31A	PH23	PH 19	RD10	RD09	EC04										
	Date: 10/21/16	Sample ID: 44321	Test Solution Prep: DM		New WQ: DM	Old WQ: JM											
								Renewal Time: 1340							Renewal Sign-off: DM		
Day 7	Control	25.4		7.46		8.2	320	2	2	2	2	2	2	2	2	2	1
	100	25.4		7.71		8.0	253	2	2	2	2	2	1	2	2	2	2
	Meter ID	31A		PH19		RD10	EC09										
	Date: 10/22/16					Old WQ: SD		Termination Time: 0820							Termination Sign-off: DM		

Chronic Larval Fish Survival and Growth Test — Pacific EcoRisk

Analysis ID:	03-2843-4105	**Endpoint:**	Mean Dry Biomass-mg	**CETIS Version:**	CETISv1.8.7
Analyzed:	25 Oct-16 10:10	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Untransformed	NA	C > T	NA	NA	19.9%	

Equal Variance t Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
CE_1016PP_C1w		CR-46R	-1.1	1.86	0.065	8	0.8476	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.003610093	0.003610093	1	1.2	0.3048	Non-Significant Effect
Error	0.02402542	0.003003177	8			
Total	0.02763551		9			

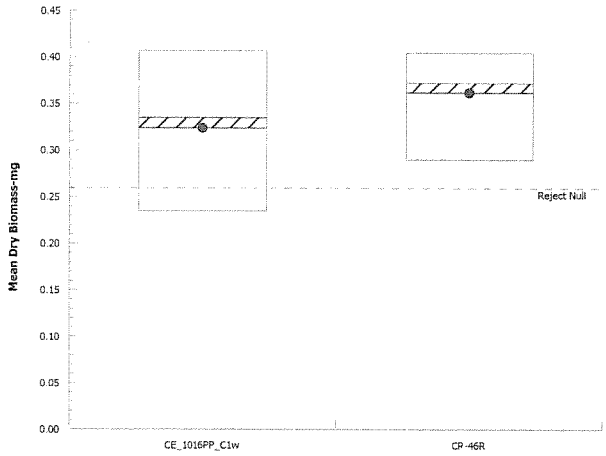
Distributional Tests

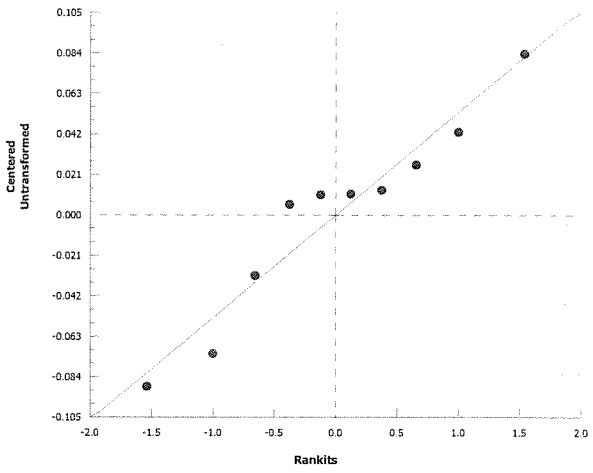
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	2.27	23.2	0.4462	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.937	0.741	0.5236	Normal Distribution

Mean Dry Biomass-mg Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016PP_C1w	5	0.324	0.244	0.404	0.335	0.235	0.408	0.0289	19.9%	0.0%
CR-46R	5	0.362	0.309	0.415	0.372	0.29	0.405	0.0192	11.8%	-11.7%

Graphics





Fathead Minnow Dry Weight Data Sheet

Client: **Condor Earth - Stockton** Test ID #: 70029 Project #: 26442

Sample: **CR-46 R** Tare Weight Date: 10/12/16 Sign-off: DJ

Test Date: 10/5/16 10/23/16 Sign-off: DJ

Pan	Concentration	Replicate	Initial Pan Weight (mg)	Final Pan Weight (mg)	Initial # of Organisms	Biomass Value (mg)
1	Control	A+B	166.03	167.43	4	0.350
2		C+D	154.33	155.96	4	0.408
3		E+F	130.95	132.12	4	0.292
4		G+H	148.05	149.39	4	0.335
5		I+J	144.46	145.40	4	0.235
6	100%	A+B	150.62	152.09	4	0.368
7		C+D	158.97	160.47	4	0.375
8		E+F	150.68	151.84	4	0.290
9		G+H	153.81	155.43	4	0.405
10		I+J	165.21	166.70	4	0.372
QA 1			152.15	152.13		
QA2			157.90	157.90		
Balance ID			Bal04	Bal04		

Chronic Larval Fish Survival and Growth Test — Pacific EcoRisk

Analysis ID:	03-6046-5799	**Endpoint:**	7d Survival Rate	**CETIS Version:**	CETISv1.8.7
Analyzed:	25 Oct-16 10:00	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Angular (Corrected)	NA	C > T	NA	NA	29.6%	

Wilcoxon Rank Sum Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	Ties	DF	P-Value	P-Type	Decision(α:5%)
CE_1016PP_C1		Field Duplicate	89	NA	2	18	0.0975	Exact	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.2247529	0.2247529	1	3.08	0.0962	Non-Significant Effect
Error	1.312557	0.07291983	18			
Total	1.53731		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	7.11	6.54	0.0074	Unequal Variances
Distribution	Shapiro-Wilk W Normality	0.801	0.866	0.0009	Non-normal Distribution

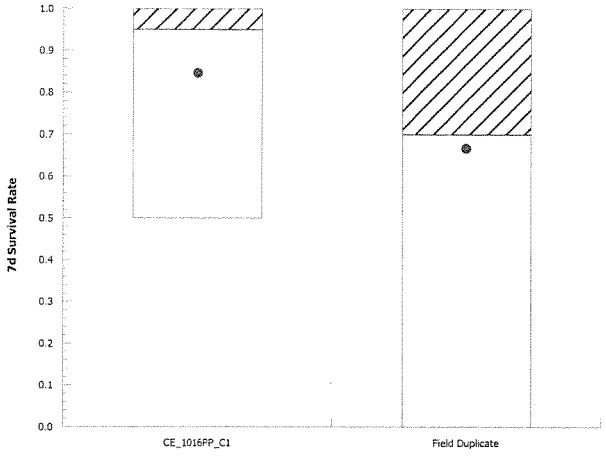
7d Survival Rate Summary

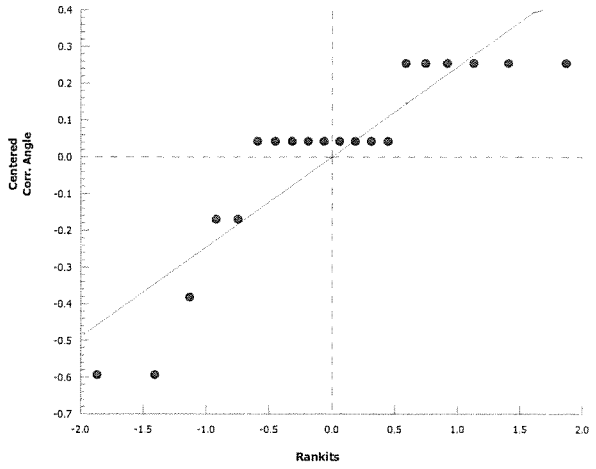
Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016PP_C1	10	0.95	0.837	1	1	0.5	1	0.05	16.6%	0.0%
Field Duplicate	10	0.7	0.398	1	1	0	1	0.133	60.2%	26.3%

Angular (Corrected) Transformed Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016PP_C1	10	1.17	1.07	1.26	1.21	0.785	1.21	0.0424	11.5%	0.0%
Field Duplicate	10	0.955	0.699	1.21	1.21	0.361	1.21	0.113	37.4%	18.2%

Graphics





7 Day Chronic Fathead Minnow Toxicity Test Data

Client: **Condor Earth - Stockton** Organism Log#: 9855 Age: <48hrs

Test Material: **Field Duplicate** Organism Supplier: Aquatox

Test ID#: 70030 Project #: 26442 Control/Diluent: EPAMH

Test Date: 10/15/16 Control Water Batch: 1925

	Treatment (%)	Temp (°C)	pH New	pH Old	D.O. (mg/L) New	D.O. (mg/L) Old	Conductivity (µS/cm)	# Live Organisms A	B	C	D	E	F	G	H	I	J
Day 0	Control	25.8	7.85		8.2		298	2	2	2	2	2	2	2	2	2	2
	100	25.8	7.86		9.5		219	2	2	2	2	2	2	2	2	2	2
	Meter ID	31A	PH23		RD11		EC09										
	Date: 10/15/16	Sample ID: 44322	Test Solution Prep: EP		New WQ: SD			Initiation Time: 1635						Initiation Sign-off: TK			
Day 1	Control	25.7	8.11	7.78	8.5	7.0	298	2	2	2	2	2	2	2	2	2	2
	100	25.7	7.77	7.55	9.1	4.0	239	2	2	2	2	2	2	2	2	2	2
	Meter ID	31A	PH23	PH23	RD09	RD09	EC09										
	Date: 10/16/16	Sample ID: 44322	Test Solution Prep: BV		New WQ: JL	Old WQ: EP		Renewal Time: 1530						Renewal Sign-off: BV			
Day 2	Control	25.8	7.83	7.76	8.8	7.8	317	2	2	2	2	2	2	2	2	2	2
	100	25.8	7.59	7.75	6.7	6.8	224	2	2	2	2	2	2	2	2	2	2
	Meter ID	31A	PH23	PH15	RD09	RD10	EC04										
	Date: 10/17/16	Sample ID: 44322	Test Solution Prep: TK		New WQ: JF	Old WQ: TA		Renewal Time: 1025						Renewal Sign-off: SH			
Day 3	Control	25.1	7.67	7.55	8.3	5.5	300	2	2	2	2	2	2	2	2	2	1
	100	25.1	7.72	7.59	6.1	5.9	215	2	2	2	2	2	2	2	2	2	2
	Meter ID	31A	PH23	PH21	RD10	RD11	EC11										
	Date: 10/18/16	Sample ID: 44322	Test Solution Prep: MDM		New WQ: SJB	Old WQ: SJB		Renewal Time: 1319						Renewal Sign-off: AB			
Day 4	Control	25.3	7.54	7.43	8.4	8.1	304	2	2	2	2	2	2	2	2	2	1
	100	25.3	7.25	7.44	3.3	7.5	216	2	2	0	2	2	2	2	0	2	2
	Meter ID	31A	PH21	PH23	RD11	RD10	EC09										
	Date: 10/19/16	Sample ID: 44322	Test Solution Prep: DM		New WQ: JF	Old WQ: ~~RD10~~ SJB		Renewal Time: 1240						Renewal Sign-off: BV			
Day 5	Control	24.7	7.25	7.64	8.7	6.7	304	2	2	2	2	2	2	2	2	2	1
	100	24.7	7.19	7.37	DM recalib 4.6 8.9	5.2	216	2	1	–	2	2	2	2	–	2	1
	Meter ID	31A	PH21	PH23	RD10	RD09	EC10										
	Date: 10/20/16	Sample ID: 44322	Test Solution Prep: TK		New WQ: SJB	Old WQ: JF		Renewal Time: 1540						Renewal Sign-off: DM			
Day 6	Control	24.9	7.79	7.75	8.9	7.1	294	2	2	2	2	2	2	2	2	2	1
	100	24.9	7.63	7.75	7.0	7.5	216	2	1	–	2	2	2	2	–	2	1
	Meter ID	31A	PH23	PH19	RD10	RD09	EC04										
	Date: 10/21/16	Sample ID: 44322	Test Solution Prep: DM		New WQ: DM	Old WQ: JM		Renewal Time: 1340						Renewal Sign-off: DM			
Day 7	Control	25.4		7.46		8.2	320	2	2	2	2	2	2	2	2	2	1
	100	25.4		7.67		7.9	226	2	1	–	2	2	2	2	–	2	1
	Meter ID	31A		PH19		RD10	EC09										
	Date: 10/22/16					Old WQ: SD		Termination Time: 0820						Termination Sign-off: DM			

Chronic Larval Fish Survival and Growth Test — Pacific EcoRisk

Analysis ID:	03-7299-0723	**Endpoint:**	Mean Dry Biomass-mg	**CETIS Version:**	CETISv1.8.7
Analyzed:	25 Oct-16 10:10	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Zeta	Alt Hyp	Trials	Seed	PMSD	Test Result
Untransformed	NA	C > T	NA	NA	32.5%	

Equal Variance t Two-Sample Test

Sample Code	vs	Sample Code	Test Stat	Critical	MSD	DF	P-Value	P-Type	Decision(α:5%)
CE_1016PP_C1w		Field Duplicate	1.33	1.86	0.105	8	0.1094	CDF	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.01425023	0.01425023	1	1.78	0.2188	Non-Significant Effect
Error	0.06402865	0.008003581	8			
Total	0.07827888		9			

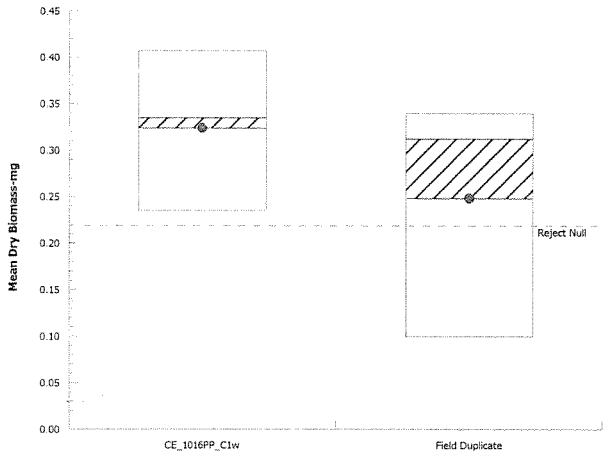
Distributional Tests

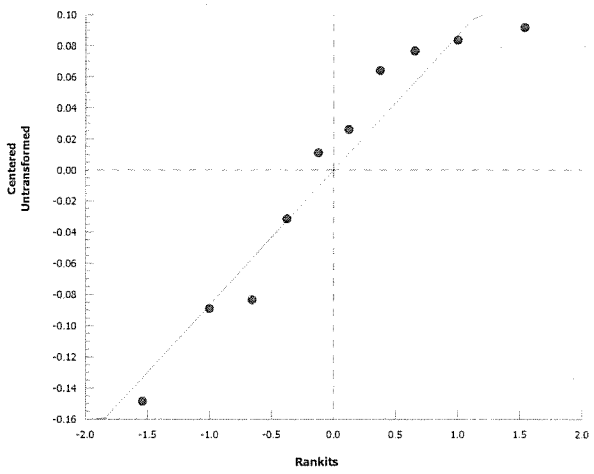
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F	2.84	23.2	0.3366	Equal Variances
Distribution	Shapiro-Wilk W Normality	0.908	0.741	0.2649	Normal Distribution

Mean Dry Biomass-mg Summary

Sample Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_1016PP_C1w	5	0.324	0.244	0.404	0.335	0.235	0.408	0.0289	19.9%	0.0%
Field Duplicate	5	0.249	0.113	0.384	0.313	0.1	0.34	0.0487	43.8%	23.3%

Graphics





Fathead Minnow Dry Weight Data Sheet

Client: **Condor Earth - Stockton** Test ID #: 70030 Project #: 26442

Sample: **Field Duplicate** Tare Weight Date: 10/17/16 Sign-off: DJ

Test Date: 10/5/16 Final Weight Date: 10/23/16 Sign-off: DJ

Pan	Concentration	Replicate	Initial Pan Weight (mg)	Final Pan Weight (mg)	Initial # of Organisms	Biomass Value (mg)
1	Control	A+B	166.03	167.43	4	0.350
2		C+D	154.33	155.96	4	0.408
3		E+F	130.95	132.12	4	0.292
4		G+H	148.05	149.39	4	0.335
5		I+J	144.46	145.40	4	0.235
11	100%	A+B	137.33	138.69	4	0.340
12		C+D	144.23	144.89	4	0.165
13		E+F	151.97	153.22	4	0.313
14		G+H	147.77	148.17	4	0.100
15		I+J	141.61	142.91	4	0.325
QA 1			152.15	152.13		
QA2			157.90	157.90		
Balance ID			Bal 04	Bal 04		

Water Column Toxicity Lab Report
May 24, 2017 at CR-46R
Dry Weather Event

Micheline Kipf
Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

June 20, 2017

Micheline:

I have enclosed our report "An Evaluation of the Chronic Toxicity of the City of Stockton Stormwater Program Ambient Water Sample" for testing performed on the ambient water sample collected on May 24, 2017. The results of this testing are summarized below:

Toxicity summary for the Stockton Stormwater Program ambient water sample.				
Sample ID	Toxicity relative to the Lab Control treatment?			
	Ceriodaphnia dubia		Fathead Minnow	
	Survival	Reproduction	Survival	Growth
CR-46R	no	**YES**	no	no

Chronic Toxicity of an Urban Ambient Water to *Ceriodaphnia dubia*
There was no significant reduction in *C. dubia* survival in the CR-46R sample. There was a significant reduction in reproduction in the CR-46R sample.

Chronic Toxicity of an Urban Ambient Water to Fathead Minnows
There was no significant reduction in fathead minnow survival or growth in the CR-46R sample.

If you have any questions regarding the performance and interpretation of these tests, please contact my colleague Stephen Clark or myself at (707) 207-7760.

Sincerely,

Michael McElroy
Project Manager

An Evaluation of the Chronic Toxicity of the City of Stockton Stormwater Program Ambient Water Sample

Sample collected May 24, 2017

Prepared For

Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206

Prepared By

Pacific EcoRisk
2250 Cordelia Rd.
Fairfield, CA 94534
(707) 207-7760

June 2017

PACIFIC ECORISK
ENVIRONMENTAL CONSULTING & TESTING

An Evaluation of the Chronic Toxicity of the City of Stockton Stormwater Program Ambient Water Sample

Sample collected May 24, 2017

Table of Contents

Appendices

1. INTRODUCTION

Condor Earth Technologies, Inc., has contracted Pacific EcoRisk (PER) to evaluate the chronic toxicity of an ambient water sample. This evaluation consisted of performing the following US EPA freshwater chronic toxicity tests:

- 3-brood survival and reproduction test with *Ceriodaphnia dubia*; and
- 7-day survival and growth test with larval fathead minnows (*Pimephales promelas*).

The current evaluation was performed using an ambient water sample collected on May 24, 2017 and designated CR-46R. This report describes the performance and results of these tests.

2. CHRONIC TOXICITY TEST PROCEDURES

This testing followed the guidelines established by the EPA manual "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition" (EPA-821-R-02-013).

2.1 Sample Receipt and Handling

On May 24, an ambient water sample was collected into appropriately cleaned sample containers. The sample was transported and delivered on ice and under chain-of-custody to the PER laboratory in Fairfield, CA. Upon receipt at the laboratory, an aliquot of the sample was collected for analysis of initial water quality characteristics (Table 1). The sample was then stored at ≤6˚C, except when being used to prepare test solutions. The chain-of-custody record for the collection and delivery of this sample is presented in Appendix A.

Table 1. Initial water quality characteristics of the sample.

Sample Receipt Date	Sample ID	Temp. (°C)	pH	D.O. (mg/L)	Alkalinity (mg/L)	Hardness (mg/L)	Conductivity (µS/cm)	Total Ammonia (mg/L N)
5/25/17	CR-46R	2.6	7.50	10.5	73	66	169	<1.0

2.2 Survival and Reproduction Toxicity Testing with *Ceriodaphnia dubia*

The chronic toxicity test with *C. dubia* consists of exposing neonate organisms to the ambient water for the length of time it takes for the Control treatment females to produce three broods (typically 6-8 days), after which effects on survival and reproduction are evaluated. The specific procedures used in this test are described below.

The Lab Water Control medium for this test consisted of a moderately hard synthetic reconstituted freshwater, prepared by addition of reagent grade chemicals to Type 1 lab water. The ambient water sample was tested at the 100% concentration only. For each test treatment, a

200 mL aliquot of test solution was amended with the alga *S. capricornutum* and Yeast-Cerophyll®-Trout Food (YCT) to provide food for the test organisms. "New" water quality characteristics (pH, D.O., and conductivity) were measured on these food-amended test solutions prior to use in this testing.

There were 10 replicates for each test treatment, each replicate consisting of 15 mL of test solution in a 30-mL plastic cup. The tests were initiated by allocating one neonate (<24 hours old, and within 8-hours of age) *C. dubia*, obtained from in-house laboratory cultures, into each replicate cup. The test replicate cups were placed into a temperature-controlled room at 25˚C, under cool white fluorescent lighting on a 16L:8D photoperiod.

Each day of the test, fresh test solutions were prepared and characterized as before, and a new set of replicate cups were prepared. The test replicates containing the test organisms were examined, with surviving organisms being transferred to the corresponding new replicate cup. The contents of each of the remaining old replicate cups was carefully examined and the number of neonate offspring produced by each parent organism was determined, after which the "old" water quality characteristics (pH, D.O., and conductivity) were measured for the old test solution from one randomly-selected replicate at each treatment.

After it was determined that ≥60% of the *C. dubia* in the Lab Water Control treatment had produced their third brood of offspring, the tests were terminated. The resulting survival and reproduction data were analyzed to evaluate any impairment caused by the ambient waters. All statistical analyses were performed using the CETIS® statistical software (TidePool Scientific, McKinleyville, CA).

2.3 Survival and Growth Toxicity Testing with Larval Fathead Minnows

The chronic toxicity test with fathead minnows consists of exposing larval fish to the ambient water for seven days, after which effects on survival and growth are evaluated. The specific procedures used in this test are described below.

Pathogen-related mortality (PRM) in chronic fathead minnow toxicity tests of ambient or ponded waters is a common confounding problem that must be controlled in order to determine the toxicity of sample waters. The US EPA has recognized this problem, and has recommended a variety of potential modifications to the testing approach that can be implemented to minimize PRM interference. The approach used in this study, described below, has the advantage of minimizing the PRM interference without affecting the water sample matrix.

The larval fathead minnows used in this testing were obtained from a commercial supplier (Aquatox, Hot Springs, AR). Upon receipt at the lab, the fish were held in aerated tanks containing Lab Water Control medium, and were fed brine shrimp nauplii *ad libitum* during this pre-test holding period.

The Lab Water Control medium for this testing consisted of EPA moderately-hard synthetic freshwater. The ambient water sample was tested at the 100% concentration only. “New” water quality characteristics (pH, D.O., and conductivity) were measured on these test solutions prior to use in the tests.

There were 10 replicates for each test treatment, each replicate consisting of 20 mL of test solution in a 30-mL test replicate container. The tests were initiated by randomly allocating two larval fathead minnows (<48 hours old) into each replicate. The replicate containers were then placed in a temperature-controlled room at 25°C, under fluorescent lighting on a 16L:8D photoperiod. The test fish were fed brine shrimp nauplii twice daily.

Each day of the tests, fresh test solutions were prepared and characterized as before. The test replicate containers were examined, with any dead animals, uneaten food, wastes, and other detritus being removed. The number of live fish in each replicate was determined and then approximately 80% of the old test solution in each beaker was carefully poured out and replaced with fresh test solution. “Old” water quality characteristics (pH, D.O., and conductivity) were measured on the old test solution that had been discarded from one randomly-selected replicate at each treatment.

After seven days exposure, the tests were terminated and the number of live fish in each replicate was recorded. The fish from each replicate were carefully euthanized in methanol, rinsed in de-ionized water, and transferred to a pre-dried and pre-tared weighing pan. Replicates were paired to obtain five composite replicates for each test treatment. The fish were then dried at 100˚C for ≥24 hours and re-weighed to determine the total dry weight of fish in each replicate. The total dry weight was then divided by the initial number of fish per composited replicate to determine the “biomass value.” The resulting survival and biomass value data were analyzed to evaluate any impairments caused by the ambient waters. All statistical analyses were performed using the CETIS statistical software.

3. RESULTS

3.1 Chronic Effects of the Ambient Water Sample on *Ceriodaphnia dubia*

The results of this test are summarized in Table 2. There was no significant reduction in *C. dubia* survival in the CR-46R sample. There was a significant reduction in reproduction in the CR-46R sample. The test data and summary of statistical analyses excluding outliers are presented in Appendix B; the summary of statistics including outliers is presented in Appendix C.

Table 2. Chronic effects of the Ambient Water sample on *Ceriodaphnia dubia*.

Treatment/Sample ID	Mean % Survival	Mean Reproduction (# neonates/female)
Lab Water Control	80	39.6[a]
CR-46R	90	**26.1***

* The response at this test treatment was significantly less than the Lab Water Control treatment response ($p < 0.05$).

a – Analysis of the data indicated the presence of an outlier in this treatment, and the results reported above are for the analyses of the test data excluding this outlier. As per EPA guidelines, the test data were analyzed both with and without the outlier, and the results of both sets of analyses are reported in the appendices.

3.2 Chronic Effects of the Ambient Water Sample on Fathead Minnows

The results of this test are summarized in Table 3. There was no significant reduction in fathead minnow survival or growth in the CR-46R sample. The test data and summary of statistical analyses for this testing are presented in Appendix D.

Table 3. Chronic effects of the ambient water sample on fathead minnow.

Treatment/Sample ID	Mean % Survival	Mean Biomass Value (mg)
Lab Water Control	100	0.54
CR-46R	95	0.55

4. SUMMARY AND CONCLUSIONS

Chronic Toxicity of an Urban Ambient Water to *Ceriodaphnia dubia*
There was no significant reduction in *C. dubia* survival in the CR-46R sample. There was a significant reduction in reproduction in the CR-46R sample.

Chronic Toxicity of an Urban Ambient Water to Fathead Minnows
There was no significant reduction in fathead minnow survival or growth in the CR-46R sample.

4.1 QA/QC Summary

Test Conditions – All test conditions (pH, D.O., temperature, etc.) were within acceptable limits. All test analyses were performed according to laboratory Standard Operating Procedures.

Negative Control –The biological responses at the Lab Control treatments were within acceptable limits.

Appendix A

Chain-of-Custody Record for the Collection and Delivery of the Sample

Condor Earth Technologies, Inc.

CONDOR

☐ PO Box 3905/21663 Brian Lane, Sonora, CA 95370, 209.532.0361, 209.532.0773 fax

☑ 188 Frank West Circle, Suite I, Stockton, CA 95206, 209.234.0518, 209.234.0538 fax

☐ 2941 Sunrise Blvd. Suite 150, Rancho Cordova, CA 95742, 916.783.2060, 916.783.2464 fax

☐ 1739 Ashby Road, Suite B, Merced, CA 95348, 209.388.9601, 209.388.1778 fax

Sample Results TAT: ☐ Rush ☑ Standard

SHIPPED TO:

Pacific EcoRisk
2250 Cordelia Road
Fairfield, CA 94534 (707) 207-7760

SEND RESULTS TO:

NAME: Micheline Doyle Kipf
E-MAIL: mkipf@condorearth.com
E-MAIL: lmulvey@condorearth.com

☑ PLEASE FAX/EMAIL RESULTS TO ADDRESS MARKED ABOVE

PROJECT NAME/LOCATION: COS Urban Discharge | EDF RESULTS REQUIRED ☐ YES ☑ NO | SITE GLOBAL ID:

PROJECT NO.: 6066J-04-01

SAMPLED BY: (Signature)

Date	Time	Sample Site Name	Sample ID (if different)	Matrix	# of containers	Preservatives (see below)	ANALYSIS /METHOD:	Field Filtered	Chronic Ceriodaphnia	Chronic flathead minnow							REMARKS	LAB ID#
5/24/17	1520		CR-46R	S	2	1		N	✓	✓	✓						chronic Ceriodaphnia dubia toxicity	
																	chrionic flathead minnow toxicity	
																	follow up dilution series as	
																	necessary (100% mortality/24hrs)	

Relinquished By: (Signature)	Date: 5-25-2017	Time: 0930	Received By: (Signature)	Date: 5/25/17	Time: 0930
Relinquished By: (Signature)			Received By: (Signature)		

Matrix: WW Waste Water; S Soil/Solid; GW Ground Water; DW Drinking Water; HWW Hazardous Waste (Water); SW Storm Water

Preservative: 1 4°C; 2 HCL; 3 NaOH; 4 $Na_2S_2O_3$; 5 HNO_3; 6 H_2SO_4; 7 Other_____

Original – Send | Yellow – File | Pink – Log Book

Appendix B

Test Data and Summary of Statistics for the Evaluation of the Chronic Toxicity of the Ambient Water Sample to *Ceriodaphnia dubia:* Analysis Excluding Outliers

CETIS Summary Report

Ceriodaphnia Survival and Reproduction Test — **Pacific EcoRisk**

Batch ID:	09-3007-2198	**Test Type:**	Reproduction-Survival (7d)	**Analyst:**	Yesenia Jaramillo
Start Date:	25 May-17 14:00	**Protocol:**	EPA-821-R-02-013 (2002)	**Diluent:**	Not Applicable
Ending Date:	31 May-17 15:30	**Species:**	Ceriodaphnia dubia	**Brine:**	Not Applicable
Duration:	6d 2h	**Source:**	In-House Culture	**Age:**	1

Comments:
Excluding reproductive outlier C-D.

Sample Code	Sample ID	Sample Date	Receipt Date	Sample Age	Client Name	Project
CE_0517CD_C1	05-7484-1572	25 May-17 14:00	25 May-17 14:00	n/a (25.4 °C)	Condor Earth Technologi	27493
CR-46R	08-9972-5305	24 May-17 15:20	25 May-17 09:30	23h (2.6 °C)		

Sample Code	Material Type	Sample Source	Station Location	Lat/Long
CE_0517CD_C1	Ambient Water	Condor Earth Technologies	LABQA	
CR-46R	Ambient Water	Condor Earth Technologies	CR-46R	

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
08-0870-1735	Reproduction	Equal Variance t Two-Sample Test	0.0028	CR-46R failed reproduction
16-1382-0480	Survival	Fisher Exact Test	0.8947	CR-46R passed survival

Reproduction Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_0517CD_C1	LW	9	39.6	34.2	44.9	27	48	2.3	6.91	17.47%	0.00%
CR-46R		10	26.1	18.3	33.9	4	39	3.44	10.9	41.64%	34.02%

Survival Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_0517CD_C1	LW	10	0.800	0.498	1.000	0.000	1.000	0.133	0.422	52.70%	0.00%
CR-46R		10	0.900	0.674	1.000	0.000	1.000	0.100	0.316	35.14%	-12.50%

Reproduction Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_0517CD_C1	LW	27	44	42		41	38	41	30	45	48
CR-46R		29	30	13	21	24	4	35	35	31	39

Survival Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_0517CD_C1	LW	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000
CR-46R		1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000

Survival Binomials

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_0517CD_C1	LW	0/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1
CR-46R		1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1

CETIS Analytical Report

Ceriodaphnia Survival and Reproduction Test — **Pacific EcoRisk**

Analysis ID:	16-1382-0480	**Endpoint:**	Survival	**CETIS Version:**	CETISv1.9.2
Analyzed:	06 Jun-17 9:54	**Analysis:**	Single 2x2 Contingency Table	**Official Results:**	Yes

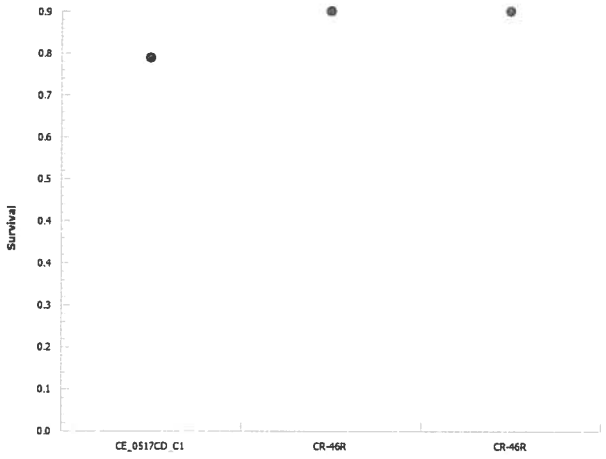
Fisher Exact Test

Sample I	vs	Sample II	Test Stat	P-Type	P-Value	Decision(α:5%)
Lab Water Control		CR-46R	0.895	Exact	0.8947	Non-Significant Effect

Data Summary

Sample	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
CE_0517CD_C1	LW	8	2	10	0.8	0.2	0.0%
CR-46R		9	1	10	0.9	0.1	-12.5%

Graphics



CETIS Analytical Report

Test Code: CE_0517CD_C1 | 09-8725-5568

Ceriodaphnia Survival and Reproduction Test — **Pacific EcoRisk**

Analysis ID:	08-0870-1735	**Endpoint:**	Reproduction	**CETIS Version:**	CETISv1.9.2
Analyzed:	06 Jun-17 9:57	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Untransformed	C > T	CR-46R failed reproduction	18.63%

Equal Variance t Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Lab Water Control		CR-46R*	3.18	1.74	7.37	17	CDF	0.0028	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	857.615	857.615	1	10.1	0.0055	Significant Effect
Error	1445.12	85.0072	17			
Total	2302.74		18			

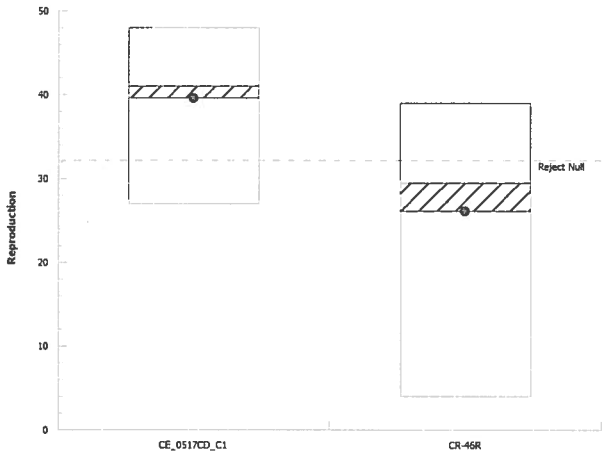
Distributional Tests

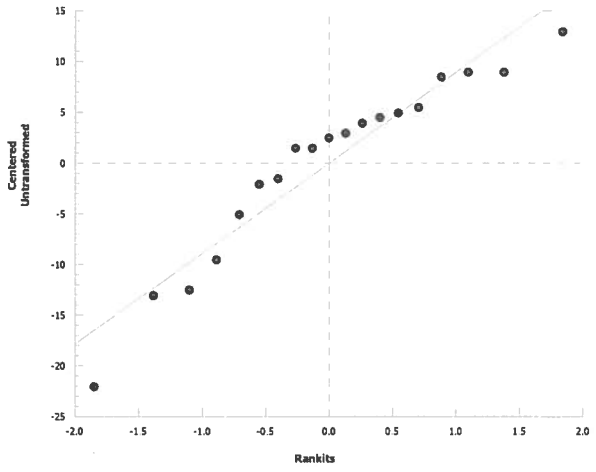
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	2.47	7.34	0.2170	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.922	0.861	0.1244	Normal Distribution

Reproduction Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_0517CD_C1	LW	9	39.6	34.2	44.9	41	27	48	2.3	17.47%	0.00%
CR-46R		10	26.1	18.3	33.9	29.5	4	39	3.44	41.64%	34.02%

Graphics





Analyst: YB QA: SVV

Short-Term Chronic 3-Brood *Ceriodaphnia dubia* Survival & Reproduction Test Data

Client: Condor Earth - Stockton Material: CR-46R Test Date: 5/25/17

Project #: 27493 Test ID: 73185 Randomization 10.3.3 Control Water: Mod EPAMH

	Day	pH New	pH Old	D.O. New	D.O. Old	Cond. (µS/cm)	Temp (°C)	Survival / Reproduction A	B	C	D	E	F	G	H	I	J	SIGN-OFF
Lab Water Control	0	8.09		8.1		348	25.4	0	0	0	0	0	0	0	0	0	0	Date: 5/24, New WQ: CA Test Init: YJ Sol'n Prep: WC Time: 1400
	1	7.96	8.03	8.4	8.2	356	25.2	0	0	0	0	0	0	0	0	0	0	Date: 5-26-17 New WQ: CO Counts: EP Sol'n Prep: BV Old WQ: BR Time: 1505
	2	7.86	7.85	8.7	8.4	331	25.4	0	0	0	0	0	0	0	0	0	0	Date: 5/27/17 New WQ: MB Counts: RC Sol'n Prep: TK Old WQ: EP Time: 1113
	3	7.91	7.95	8.6	8.3	336	25.5	6	6	6	5	5	7	6	6	7	8	Date: 5/28/17 New WQ: BR Counts: JL Sol'n Prep: SF Old WQ: EP Time: 1510
	4	7.73	7.84	8.3	8.4	345	25.4	0	0	0	X/0	0	0	0	10	0	0	Date: 5/29/17 New WQ: JL Counts: WC Sol'n Prep: SF Old WQ: SF Time: 1255
	5	7.95	7.81	8.2	8.2	345	25.1	14	15	14	-	14	13	15	0	16	18	Date: 5/30/17 New WQ: TF Counts: JO Sol'n Prep: JL Old WQ: MB Time: 1457
	6	—	7.73	—	8.1	380	25.4	X/7	23	22	-	22	18	20	14	22	22	Date: 5/31/17 New WQ: — Counts: WC Sol'n Prep: — Old WQ: WC Time: 1530
	7							-			-							Date: New WQ: Counts: Sol'n Prep: Old WQ: Time:
	8							-			-							Date: Old WQ: Counts: Time:
							Total=	X/27	44	42	X/5	41	38	41	30	45	48	Mean Neonates/Female = 36.1

	Day	pH New	pH Old	D.O. New	D.O. Old	Cond. (µS/cm)	Survival / Reproduction A	B	C	D	E	F	G	H	I	J	SAMPLE ID
100%	0	8.11		8.7		151	0	0	0	0	0	0	0	0	0	0	46589
	1	8.04	8.06	10.0	8.1	171	0	0	0	0	0	0	0	0	0	0	46589
	2	7.87	7.88	8.7	8.4	1660	0	0	0	0	0	0	0	0	0	0	46589
	3	7.84	7.92	9.8	8.0	169	5	5	0	3	4	4	4	0	6	5	46589
	4	7.77	7.86	9.4	8.1	171	0	0	0	15	6	0	8	0	0	0	46589
	5	7.85	7.81	9.9	7.8	169	6	8	10	0	0	X/0	0	12	8	11	46589
	6	—	7.90	—	8.0	190	18	17	3	3	14	-	23	23	17	23	—
	7											-					
	8											-					
							Total=	29	30	13	21	24	X/4	35	35	31	39	Mean Neonates/Female = 26.1

Appendix C

Summary of Statistics for the Evaluation of the Chronic Toxicity of the Ambient Water Sample to *Ceriodaphnia dubia*: Analysis Including Outliers

CETIS Summary Report

Ceriodaphnia Survival and Reproduction Test — **Pacific EcoRisk**

Batch ID:	09-3007-2198	**Test Type:**	Reproduction-Survival (7d)	**Analyst:**	Yesenia Jaramillo
Start Date:	25 May-17 14:00	**Protocol:**	EPA-821-R-02-013 (2002)	**Diluent:**	Not Applicable
Ending Date:	31 May-17 15:30	**Species:**	Ceriodaphnia dubia	**Brine:**	Not Applicable
Duration:	6d 2h	**Source:**	In-House Culture	**Age:**	1

Comments:
Including reproductive outlier C-D.

Sample Code	Sample ID	Sample Date	Receipt Date	Sample Age	Client Name	Project
CE_0517CD_C1	05-7484-1572	25 May-17 14:00	25 May-17 14:00	n/a (25.4 °C)	Condor Earth Technologi	27493
CR-46R	08-9972-5305	24 May-17 15:20	25 May-17 09:30	23h (2.6 °C)		

Sample Code	Material Type	Sample Source	Station Location	Lat/Long
CE_0517CD_C1	Ambient Water	Condor Earth Technologies	LABQA	
CR-46R	Ambient Water	Condor Earth Technologies	CR-46R	

SIngle Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
17-5993-4047	Reproduction	Wilcoxon Rank Sum Two-Sample Test	0.0122	CR-46R failed reproduction
16-1382-0480	Survival	Fisher Exact Test	0.8947	CR-46R passed survival

Reproduction Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_0517CD_C1	LW	10	36.1	27	45.2	5	48	4.02	12.7	35.24%	0.00%
CR-46R		10	26.1	18.3	33.9	4	39	3.44	10.9	41.64%	27.70%

Survival Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_0517CD_C1	LW	10	0.800	0.498	1.000	0.000	1.000	0.133	0.422	52.70%	0.00%
CR-46R		10	0.900	0.674	1.000	0.000	1.000	0.100	0.316	35.14%	-12.50%

Reproduction Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_0517CD_C1	LW	27	44	42	5	41	38	41	30	45	48
CR-46R		29	30	13	21	24	4	35	35	31	39

Survival Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_0517CD_C1	LW	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000
CR-46R		1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000

Survival Binomials

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_0517CD_C1	LW	0/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1	1/1	1/1
CR-46R		1/1	1/1	1/1	1/1	1/1	0/1	1/1	1/1	1/1	1/1

CETIS Analytical Report

Ceriodaphnia Survival and Reproduction Test — **Pacific EcoRisk**

Analysis ID:	17-5993-4047	**Endpoint:**	Reproduction	**CETIS Version:**	CETISv1.9.2
Analyzed:	06 Jun-17 9:55	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Untransformed	C > T	CR-46R failed reproduction	25.42%

Wilcoxon Rank Sum Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision(α:5%)
Lab Water Control		CR-46R*	75.5	n/a	1	18	Exact	0.0122	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	500	500	1	3.57	0.0750	Non-Significant Effect
Error	2519.8	139.989	18			
Total	3019.8		19			

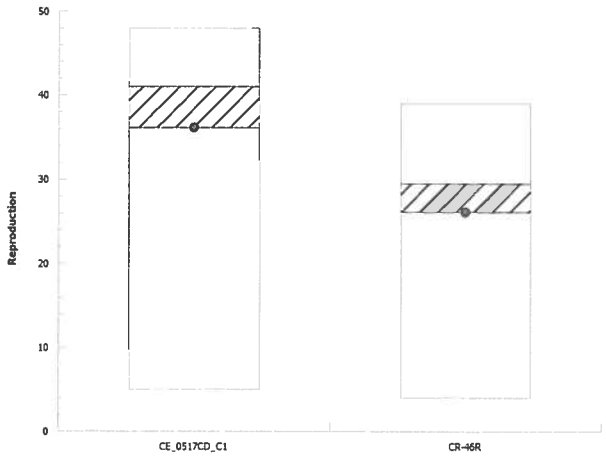
Distributional Tests

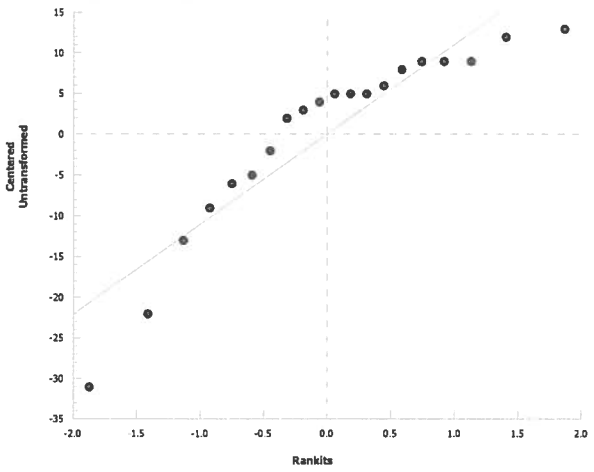
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	1.37	6.54	0.6462	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.859	0.866	0.0077	Non-Normal Distribution

Reproduction Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_0517CD_C1	LW	10	36.1	27	45.2	41	5	48	4.02	35.24%	0.00%
CR-46R		10	26.1	18.3	33.9	29.5	4	39	3.44	41.64%	27.70%

Graphics





Appendix D

Test Data and Summary of Statistics for the Evaluation of the Chronic Toxicity of the Ambient Water Sample to Fathead Minnows

CETIS Summary Report

Chronic Larval Fish Survival and Growth Test — **Pacific EcoRisk**

Batch ID:	06-2272-0671	**Test Type:**	Growth-Survival (7d)	**Analyst:**	Yesenia Jaramillo
Start Date:	25 May-17 14:45	**Protocol:**	EPA-821-R-02-013 (2002)	**Diluent:**	Not Applicable
Ending Date:	01 Jun-17 14:30	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	7d	**Source:**	Aquatox, AR	**Age:**	1

Sample Code	Sample ID	Sample Date	Receipt Date	Sample Age	Client Name	Project
CE_0517PP_C1	01-7748-8471	25 May-17 14:45	25 May-17 14:45	n/a (25 °C)	Condor Earth Technologi	27493
CR-46R	08-9972-5305	24 May-17 15:20	25 May-17 09:30	23h (2.6 °C)		

Sample Code	Material Type	Sample Source	Station Location	Lat/Long
CE_0517PP_C1	Ambient Water	Condor Earth Technologies	LABQA	
CR-46R	Ambient Water	Condor Earth Technologies	CR-46R	

Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
18-5513-3536	7d Survival Rate	Wilcoxon Rank Sum Two-Sample Test	0.5000	CR-46R passed 7d survival rate

7d Survival Rate Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_0517PP_C1	LW	10	1.000	1.000	1.000	1.000	1.000	0.000	0.000	0.00%	0.00%
CR-46R		10	0.950	0.837	1.000	0.500	1.000	0.050	0.158	16.64%	5.00%

7d Survival Rate Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_0517PP_C1	LW	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CR-46R		1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.500	1.000	1.000

7d Survival Rate Binomials

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
CE_0517PP_C1	LW	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2
CR-46R		2/2	2/2	2/2	2/2	2/2	2/2	2/2	1/2	2/2	2/2

CETIS Summary Report

Chronic Larval Fish Survival and Growth Test — **Pacific EcoRisk**

Batch ID:	08-7366-4774	**Test Type:**	Growth-Survival (7d)	**Analyst:**	Yesenia Jaramillo
Start Date:	25 May-17 14:45	**Protocol:**	EPA-821-R-02-013 (2002)	**Diluent:**	Not Applicable
Ending Date:	01 Jun-17 14:30	**Species:**	Pimephales promelas	**Brine:**	Not Applicable
Duration:	7d	**Source:**	Aquatox, AR	**Age:**	1

Sample Code	Sample ID	Sample Date	Receipt Date	Sample Age	Client Name	Project
CE_0517PP_C1w	19-2610-9013	25 May-17 14:45	25 May-17 14:45	n/a (25 °C)	Condor Earth Technologi	27493
CR-46R	08-9972-5305	24 May-17 15:20	25 May-17 09:30	23h (2.6 °C)		

Sample Code	Material Type	Sample Source	Station Location	Lat/Long
CE_0517PP_C1w	Ambient Water	Condor Earth Technologies	LABQA	
CR-46R	Ambient Water	Condor Earth Technologies	CR-46R	

SIngle Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
02-1797-2449	Mean Dry Biomass-mg	Equal Variance t Two-Sample Test	0.5199	CR-46R passed mean dry biomass-mg

Mean Dry Biomass-mg Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
CE_0517PP_C1w	LW	5	0.544	0.472	0.615	0.473	0.59	0.0256	0.0573	10.54%	0.00%
CR-46R		5	0.545	0.465	0.626	0.44	0.6	0.029	0.0648	11.88%	-0.37%

Mean Dry Biomass-mg Detail

Sample	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
CE_0517PP_C1w	LW	0.585	0.59	0.58	0.49	0.473
CR-46R		0.535	0.557	0.595	0.44	0.6

CETIS Analytical Report

Report Date: 06 Jun-17 10:36 (p 1 of 1)
Test Code: CE_0517PP_C1 | 16-2518-2307

Chronic Larval Fish Survival and Growth Test — Pacific EcoRisk

Analysis ID:	18-5513-3536	**Endpoint:**	7d Survival Rate	**CETIS Version:**	CETISv1.9.2
Analyzed:	06 Jun-17 10:36	**Analysis:**	Nonparametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Angular (Corrected)	C > T	CR-46R passed 7d survival rate	17.75%

Wilcoxon Rank Sum Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	Ties	DF	P-Type	P-Value	Decision(α:5%)
Lab Water Control		CR-46R	100	n/a	1	18	Exact	0.5000	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0089901	0.0089901	1	1	0.3306	Non-Significant Effect
Error	0.161822	0.0089901	18			
Total	0.170812		19			

Distributional Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	3.8E+13	6.54	<1.0E-37	Unequal Variances
Distribution	Shapiro-Wilk W Normality Test	0.405	0.866	4.9E-08	Non-Normal Distribution

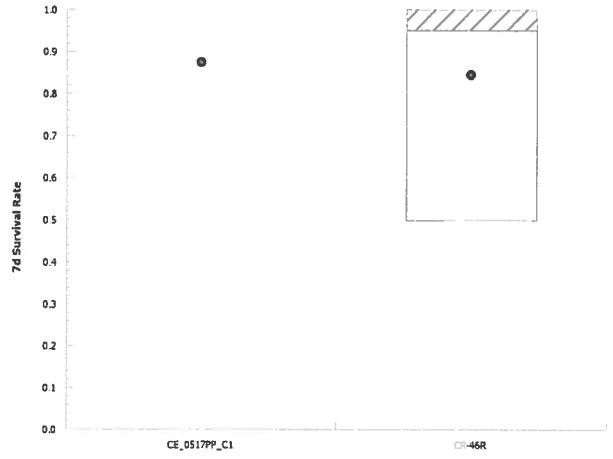
7d Survival Rate Summary

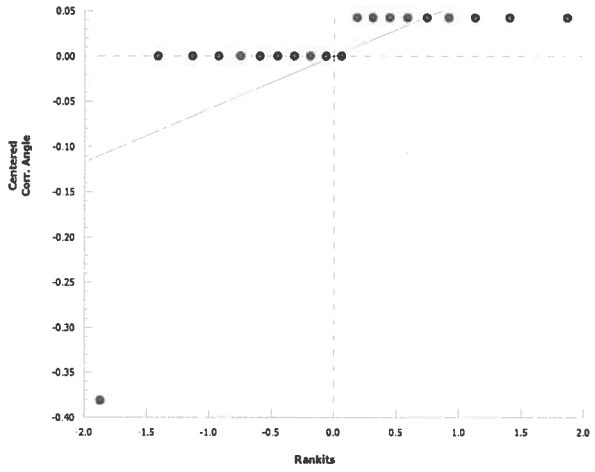
Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_0517PP_C1	LW	10	1.000	1.000	1.000	1.000	1.000	1.000	0.000	0.00%	0.00%
CR-46R		10	0.950	0.837	1.000	1.000	0.500	1.000	0.050	16.64%	5.00%

Angular (Corrected) Transformed Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_0517PP_C1	LW	10	1.21	1.21	1.21	1.21	1.21	1.21	0	0.00%	0.00%
CR-46R		10	1.17	1.07	1.26	1.21	0.785	1.21	0.0424	11.49%	3.51%

Graphics





CETIS Analytical Report

Chronic Larval Fish Survival and Growth Test — **Pacific EcoRisk**

Analysis ID:	02-1797-2449	**Endpoint:**	Mean Dry Biomass-mg	**CETIS Version:**	CETISv1.9.2
Analyzed:	06 Jun-17 10:31	**Analysis:**	Parametric-Two Sample	**Official Results:**	Yes

Data Transform	Alt Hyp	Comparison Result	PMSD
Untransformed	C > T	CR-46R passed mean dry biomass-mg	13.23%

Equal Variance t Two-Sample Test

Sample I	vs	Sample II	Test Stat	Critical	MSD	DF	P-Type	P-Value	Decision(α:5%)
Lab Water Control		CR-46R	-0.0516	1.86	0.072	8	CDF	0.5199	Non-Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	9.943E-06	9.943E-06	1	0.00266	0.9601	Non-Significant Effect
Error	0.0299244	0.0037406	8			
Total	0.0299344		9			

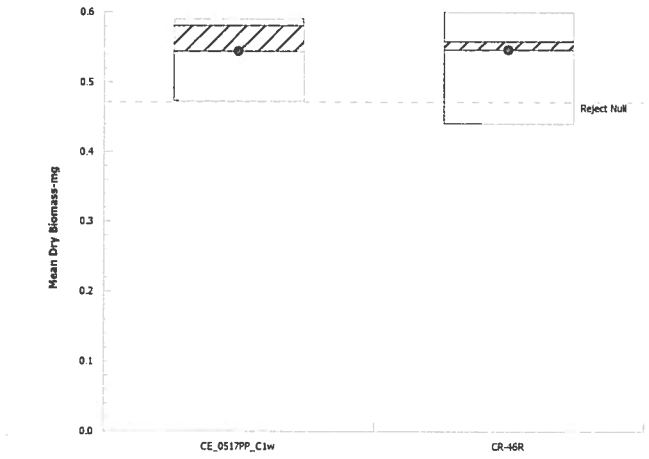
Distributional Tests

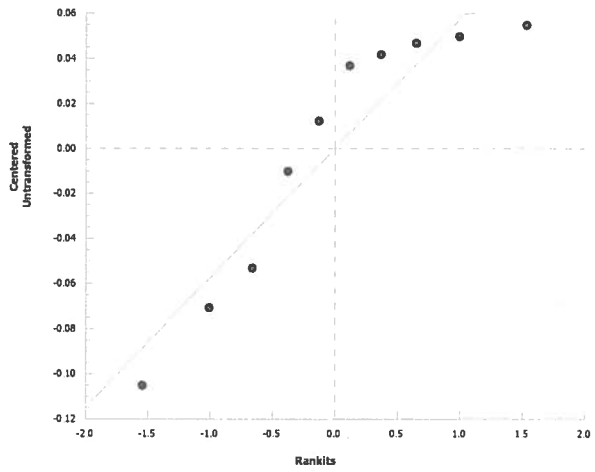
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variances	Variance Ratio F Test	1.28	23.2	0.8162	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.858	0.741	0.0723	Normal Distribution

Mean Dry Biomass-mg Summary

Sample	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
CE_0517PP_C1w	LW	5	0.544	0.472	0.615	0.58	0.473	0.59	0.0256	10.54%	0.00%
CR-46R		5	0.545	0.465	0.626	0.557	0.44	0.6	0.029	11.88%	-0.37%

Graphics





7 Day Chronic Fathead Minnow Toxicity Test Data

Client: **Condor Earth - Stockton** Organism Log#: 10319 Age: <48hrs

Test Material: **CR-46R** Organism Supplier: Aquatox

Test ID#: 73186 Project #: 27493 Control/Diluent: EPAMH

Test Date: 5/25/17 Control Water Batch: 1988

	Treatment (%)	Temp (°C)	pH New	pH Old	D.O. (mg/L) New	D.O. (mg/L) Old	Conductivity (µS/cm)	# Live Organisms A	B	C	D	E	F	G	H	I	J
Day 0	Control	25.0	8.03		8.3		306	2	2	2	2	2	2	2	2	2	2
	100	25.0	2.10		9.9		158	2	2	2	2	2	2	2	2	2	2
	Meter ID	31A	PH21		RD11		EC04										
	Date: 5/25/17	Sample ID: 46589	Test Solution Prep: WC		New WQ: IA			Initiation Time: 1445				Initiation Sign-off: YJ					
Day 1	Control	24.6	7.49	7.86	8.5	8.2	305	2	2	2	2	2	2	2	2	2	2
	100	24.8	7.67	7.72	9.9	6.2	163	2	2	2	2	2	2	2	2	2	2
	Meter ID	81A	PH19	PH19	RD12	RD11 ~~EC11~~	EC11										
	Date: 5-26-17	Sample ID: 46589	Test Solution Prep: BV		New WQ: JW	Old WQ: APF		Renewal Time: 1400				Renewal Sign-off: TK					
Day 2	Control	25.7	7.97	7.26	8.3	5.1	313	2	2	2	2	2	2	2	2	2	2
	100	26.0	7.93	7.39	9.1	5.5	164	2	2	2	2	2	2	2	2	2	2
	Meter ID	72A	PH23	PH23	RD12	RD12	EC04										
	Date: 5/27/17	Sample ID: 46589	Test Solution Prep: TK		New WQ: MB	Old WQ: MB		Renewal Time: 1350				Renewal Sign-off: JZ					
Day 3	Control	25.6	8.21	7.39	8.5	5.4	314	2	2	2	2	2	2	2	2	2	2
	100	25.8	8.08	7.43	10.7	5.6	167	2	2	2	2	2	2	2	1	2	2
	Meter ID	100A	PH23	PH19	RD10	RD11	EC04										
	Date: 5/28/17	Sample ID: 46589	Test Solution Prep: SP		New WQ: TF	Old WQ: TA		Renewal Time: 1230				Renewal Sign-off: TK					
Day 4	Control	25.7	7.22	7.53	8.4	5.2	310	2	2	2	2	2	2	2	2	2	2
	100	25.7	7.30	7.60	10.1	6.3	171	2	2	2	2	2	2	2	1	2	2
	Meter ID	100A	PH21	PH23	RD10	RD11	EC10										
	Date: 5/29/17	Sample ID: 46589	Test Solution Prep: SF		New WQ: JZ	Old WQ: JZ		Renewal Time: 1130				Renewal Sign-off: TK					
Day 5	Control	25.1	7.90	7.49	8.4	TF 5/30/17 ~~5.1~~ 6.1	305	2	2	2	2	2	2	2	2	2	2
	100	25.3	7.82	7.57	10.1	6.3	169	2	2	2	2	2	2	2	1	2	2
	Meter ID	98A	PH23	PH23	RD11	RD11	EC04										
	Date: 5/30/17	Sample ID: 46589	Test Solution Prep: JZ		New WQ: TF	Old WQ: TF		Renewal Time: 1035				Renewal Sign-off: SF					
Day 6	Control	25.2	7.59	7.55	8.2	6.0	327	2	2	2	2	2	2	2	2	2	2
	100	25.3	7.72	7.67	10.1	6.5	171	2	2	2	2	2	2	2	1	2	2
	Meter ID CO 5/31	~~46~~ 100A	PH21	PH19	RD11	RD09	EC11										
	Date: 5/31/17	Sample ID: 46589	Test Solution Prep: CO		New WQ: APF	Old WQ: GB		Renewal Time: 0955				Renewal Sign-off: ~~APF~~					
Day 7	Control	25.3	~~7.70~~	~~7.65~~ SBB 5/31	~~6.8~~	~~6.0~~ SBB 5/31	~~323~~ SBB 5/31	2	2	2	2	2	2	2	2	2	2
	100	25.4	~~7.69~~	~~7.67~~ SBB 5/31	~~6.7~~	~~6.5~~ SBB 5/31	~~177.8~~ SBB 5/31	2	2	2	2	2	2	2	1	2	2
	Meter ID	81A	~~PH23~~	~~PH19~~ SBB 5/31	~~RD10~~	~~RD09~~ SBB 5/31	~~EC04~~ SBB 5/31										
	Date: 6/1/17					Old WQ: SB SB	EC11	Termination Time: 1430				Termination Sign-off: TK					

SB 5/31

Fathead Minnow Dry Weight Data Sheet

Client: **Condor Earth - Stockton** Test ID #: 73186 Project #: 27493

Sample: **CR-46R** Tare Weight Date: 5-29-17 Sign-off: [illegible]

Test Date: 5/25/17 Final Weight Date: 6/4/17 Sign-off: RB

Pan	Concentration	Replicate	Initial Pan Weight (mg)	Final Pan Weight (mg)	Initial # of Organisms	Biomass Value (mg)
1	Control	A+B	410.79	413.13	4	0.585
2		C+D	409.28	411.64	4	0.590
3		E+F	414.97	417.29	4	0.580
4		G+H	413.86	415.82	4	0.490
5		I+J	410.25	412.14	4	0.473
6	100%	A+B	415.12	417.26	4	0.535
7		C+D	412.60	414.83	4	0.557
8		E+F	411.70	414.08	4	0.595
9		G+H	413.17	414.93	4	0.440
10		I+J	410.63	413.03	4	0.600
QA 1			410.39	410.40	–	–
QA2			409.57	409.56	–	–
Balance ID			Bal 04	BAL04		