



The Boeing Company  
Santa Susana Field Laboratory  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

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Via CIWQS

August 15, 2025

In reply refer to SHEA-116970

Information Technology Unit  
Los Angeles Regional Water Quality Control Board  
320 West 4th Street, Suite 200  
Los Angeles, California 90013

Subject: Second Quarter 2025 NPDES Discharge Monitoring Report  
Compliance File CI-6027 and NPDES No. CA0001309  
Santa Susana Field Laboratory  
Ventura County, California

The Boeing Company (Boeing) hereby submits this Discharge Monitoring Report (DMR) for the Santa Susana Field Laboratory (Santa Susana Site) for the period of April 1 through June 30, 2025 (Second Quarter 2025). This DMR was prepared as required by, and in accordance with, the National Pollutant Discharge Elimination System Permit No. CA0001309 (NPDES Permit) issued by the Los Angeles, California Regional Water Quality Control Board (Regional Board) in 2023 (California Regional Water Quality Control Board, Los Angeles Region, 2023). The NPDES Permit covers the entire Santa Susana Site, which includes approximately 2,400 acres owned by Boeing and approximately 450 acres owned by the United States and administered by the National Aeronautics and Space Administration (NASA). Department of Energy (DOE) has assumed responsibility to remediate approximately 472 acres of Boeing's land.

An electronic version of this DMR is located at: <http://www.boeing.com/principles/environment/santa-susana/monitoring-reports.page>.

## **SECOND QUARTER 2025 DMR COVER LETTER CONTENTS**

This DMR cover letter includes the following sections and attachments:

- Stormwater Treatment System Activities
- Discharge and Sample Collection Summary
- Summary of Exceedances and/or Non-Compliance
- Stormwater Pollution Prevention Plan/Best Management Practice Activities
- List of Tables (included as attachments)
  - TABLE 1: SWTS Maintenance Activities, Second Quarter 2025
  - TABLE 2: SWTS Operational Activities, Second Quarter 2025
  - TABLE 3: Sampling Record, Second Quarter 2025
  - TABLE 4: BMP Activities, Second Quarter 2025

## **STORMWATER TREATMENT SYSTEM ACTIVITIES**

The Stormwater Treatment System (SWTS), located near R-1 Pond (SWTS 011, see Figure 1), discharges through Outfall 011. The SWTS located at Silvernale Pond (SWTS 018, see Figure 1) discharges through Outfall 018. SWTS maintenance activities completed in the Second Quarter 2025 are included in Table 1.

SWTS 011 and SWTS 018 did not operate during the Second Quarter 2025. Final volumes of operational solids generated during the First Quarter 2025 and processed in the Second Quarter 2025 are presented in Table 2.

## **DISCHARGE AND SAMPLE COLLECTION SUMMARY**

Two qualifying rain events occurred during the Second Quarter 2025 (Appendix A). Neither of the rain events produced stormwater discharges at any of the outfalls, therefore no stormwater samples were collected during the Second Quarter 2025. Composite sampling at Outfall 002 was conducted on April 1, 2025, for a qualifying rain event that ended March 31, 2025. Since this event occurred in the first quarter, the results were included in the First Quarter 2025 DMR and is not duplicated in this DMR. There were no changes in the discharges as described in the NPDES Permit during the reporting period.

One quarterly off-site receiving water sample was collected at the Arroyo Simi location (RSW-002, Frontier Park; see Figure 2). The annual sediment sample was also collected at the Arroyo Simi - Frontier Park location on June 12, 2025.

Table 3 summarizes the Second Quarter 2025 sampling record by date by outfall or location, sample frequency, and sample type collected per NPDES Permit requirements. Sample results are included in Appendix C.

Boeing affirms that “With the exception of field tests, all analyses were conducted at a laboratory certified for such analyses by the State Water Board, Division of Drinking Water, Environmental Laboratory Accreditation Program or approved by the Executive Officer and in accordance with current U.S. EPA guideline procedures or as specified in this [Monitoring and Reporting Program] MRP.” Toxicity laboratory reports and validation reports (if validation was performed), are included in Appendix D.

## **SUMMARY OF EXCEEDANCES AND/OR NON-COMPLIANCE**

A qualifying rain event occurred from March 30 to March 31, 2025, with composite samples collected on April 1, 2025, and previously reported in the First Quarter 2025 DMR, had no exceedances. No other surface water discharges occurred from the Santa Susana Site during the Second Quarter 2025; therefore, there are no on-site compliance issues to report for this period. Additionally, in the quarterly surface water sample collected at Arroyo Simi sampling location (RSW-002, Frontier Park) in Simi Valley, no constituents exceeded receiving water limits.

## **STORMWATER POLLUTION PREVENTION PLAN/BEST MANAGEMENT PRACTICE ACTIVITIES**

### **BOEING-RELATED ACTIVITIES**

Boeing implemented Best Management Practice (BMP) activities in compliance with the site-wide Stormwater Pollution Prevention Plan (SWPPP; Haley & Aldrich, Inc., 2024) to assist in improving stormwater

quality and compliance at the Santa Susana Site. Boeing updates the SWPPP annually to include a summary of areas of past industrial activity, as well as a description of past industrial and current remediation activities, material handling and storage areas.

Additional BMP activities were performed, commenced, or completed during the Second Quarter 2025 in coordination with the Expert Panel. Table 4 summarizes the BMP activities completed during the Second Quarter 2025 by outfall or BMP location.

In addition to site-wide SWPPP-related activities, specific BMP projects included NASA and DOE activities. These are discussed below.

#### **NASA-RELATED ACTIVITIES**

NASA reported no BMP-related activities during the Second Quarter 2025.

#### **DOE-RELATED ACTIVITIES**

DOE reported no BMP-related activities during the Second Quarter 2025.

### **CONCLUSIONS**

Boeing is committed to fulfilling the requirements of the NPDES Permit and continues to implement, maintain, and monitor wide-ranging control practices intended to improve water quality at stormwater discharge locations at the Santa Susana Site through methods designed to preserve the natural conditions in the watershed to the maximum extent feasible. The Surface Water Expert Panel is reviewing the data collected and will make BMP and monitoring recommendations that will be communicated in the Surface Water Expert Panel's 2025 Annual Report.

### **FACILITY CONTACT**

If there are any questions regarding this report or its enclosures, you may contact Mr. Jeffrey Wokurka of Boeing at (818) 466-8800.

### **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 fine and imprisonment for knowing violations.

Executed on the 15th of August 2025 at The Boeing Company, Seal Beach, California Site.

Sincerely,

*Kim O'Rourke*

Kim O'Rourke  
Global Remediation and Due Diligence Program Manager  
Global Enterprise Sustainability - Environment



Enclosures:

References

Table 1 - SWTS Maintenance Activities, Second Quarter 2025

Table 2 - SWTS Operational Activities, Second Quarter 2025

Table 3 - Sampling Record, Second Quarter 2025

Table 4 - BMP Activities, Second Quarter 2025

Attachments:

Figure 1 - Site Map with Stormwater Collection and Conveyance System and Site Features

Figure 2 - Arroyo Simi Receiving Water Downstream (RSW-002) and Upstream (RSW-003)

Sampling Locations

Appendix A - Rainfall Data Summary, Second Quarter 2025

Appendix B - Waste Shipment Summary Table, Second Quarter 2025

Appendix C - Discharge Monitoring Data Summary Tables, Second Quarter 2025

Appendix D - Toxicity Laboratory Reports and Validation Reports, Second Quarter 2025

Appendix E - Receiving Water Surveys, Second Quarter 2025

**REFERENCES**

1. California Regional Water Quality Control Board, Los Angeles Region, 2023. *Waste Discharge Requirements for The Boeing Company, Santa Susana Field Laboratory (Order No. R4-2023-0359, NPDES No. CA0001309, CI Number 6027)*. 19 October.
2. Haley & Aldrich, Inc., 2024. *Stormwater Pollution and Prevention Plan (Version 1 for Compliance with 2023 NPDES Permit)*. 29 March. Updated annually.



## TABLES

**TABLE 1**

**SWTS MAINTENANCE ACTIVITIES, SECOND QUARTER 2025**

THE BOEING COMPANY

SANTA SUSANA FIELD LABORATORY

NPDES PERMIT CA0001309

SWTS	Activities During Second Quarter 2025
011	At the beginning of the quarter, water in the system was recirculated and the sand filters were coated with potassium permanganate to ensure the system was fully operational for rain events.
	Performed long-term shutdown activities, including decanting and draining water from tanks; cleaning chemical sheds, chemical boxes, and pumps; removing residual chemicals; purging chemical lines with nitrogen; transferring chemicals to the 407 yard; cleaning out the plate settler; securing mixing blades in the ActiFlo; and opening hatches on vessels and tanks to allow for drying.
	Repaired doors for the HCl, Polymer, and Sodium Hydroxide sheds.
	Painted handrails, safety railings, gates, and chemical sheds.
018	At the beginning of the quarter, water in the system was recirculated and the sand filters were coated with potassium permanganate to ensure the system was fully operational for rain events.
	Re-built filter feed pump (replaced O-rings, seals, bearings).
	Processed solids in system through the dewatering unit.
	Performed weed abatement.
	Changed oil in the Actiflo mixers.
	Performed long-term shutdown activities, including decanting and draining water from tanks; cleaning chemical sheds, chemical boxes, and pumps; removing residual chemicals; purging chemical lines with nitrogen; transferring chemicals to the 407 yard; cleaning out the plate settler; securing mixing blades in the ActiFlo; and opening hatches on vessels and tanks to allow for drying.
Painted handrails, safety railings, gates, and chemical sheds.	

**TABLE 2**

**SWTS OPERATIONAL ACTIVITIES, SECOND QUARTER 2025**

THE BOEING COMPANY

SANTA SUSANA FIELD LABORATORY

NPDES PERMIT CA0001309

<b>SWTS</b>	<b>Operational Event</b>	<b>Operational Dates and Hours</b>	<b>Total Amount of Water Treated and Discharged (gallons)</b>
011		SWTS 011 did not operate during the Second Quarter 2025	0
018		SWTS 018 did not operate during the Second Quarter 2025	0

018	The total amount of solids generated by SWTS 018 during the First Quarter 2025 was approximately 15 cubic yards.		
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**TABLE 3**  
**SAMPLING RECORD, SECOND QUARTER 2025**  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309

<b>Date (Grab)</b>	<b>Date (Composite)</b>	<b>Outfall/Location</b>	<b>Sample Frequency</b>
6/12/2025	NA	Arroyo Simi Downstream Receiving Water (RSW-002)	Quarterly
6/12/2025	NA	Arroyo Simi Downstream Receiving Water (RSW-002)	Annual sediment

**Notes:**

*N/A = Not applicable.*

*Annual = 1 per year.*

*Quarterly = 1 per quarter.*

**TABLE 4**  
**BMP ACTIVITIES, SECOND QUARTER 2025**  
 THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 NPDES PERMIT CA0001309

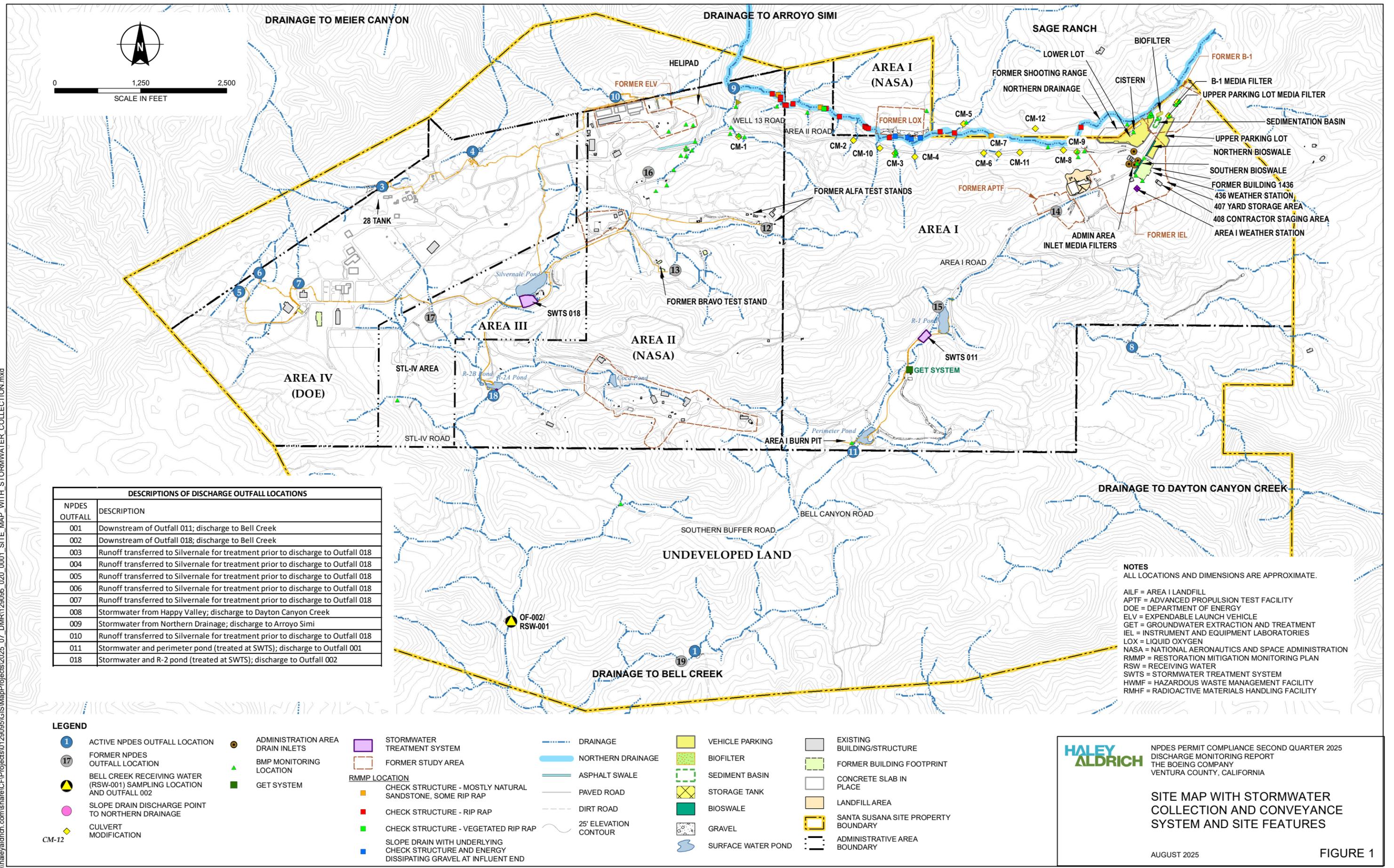
Outfall, Watershed, BMP, or Other Location	BMP Activities During Second Quarter 2025
<i>SWPPP-Related Activities</i>	
001	Cleaned sample box and flume, performed weed abatement, cleaned and removed debris from check structures, staircase, walkway, and flume.
002	Repaired strainer for autosamplers, cleaned sample box and flume, removed spent wattles on road, and performed weed abatement.
003	Performed maintenance on autosamplers and flowmeters, including repairing electrical issues, replacing solar panels, reprogramming, inspecting components, replacing batteries, and verifying calibration. Performed weed abatement.
004	Removed loose gravel from the road, cleared weeds from the media bed and surrounding areas, cleaned leaves and debris from the channel, repaired the felt liner, cleaned the spillway and flume, and performed weed abatement.
005	Replaced transformer for power line, mounted new caution signs, change and greased motor for conveyance pumps, replaced spent wattles, repaired and cleaned flume, and performed weed abatement.
006	Replaced transformer for power line, repaired felt on the media bed, replaced batteries on the autosampler, performed an oil change on the conveyance pump, and completed weed abatement.
007	Cleaned sample box and flume, performed weed abatement, removed overgrown tree branches on road, cleaned and removed debris from staircase, and replaced spent wattles.
008	Removed debris from check structures, cleaned sample box and flume and performed weed abatement.
009	Removed fallen oak free, cleaned sample box and flume, cleaned out cheek structures, performed weed abatement.
010	Cleaned sample box and flume, performed weed abatement and tree trimming, and replaced spent wattles.
011	Performed walkway improvements, repaired strainer for autosamplers, completed berm upgrades with felt and riprap, installed new sump pump, painted conveyance pumps, removed spent wattles, performed weed abatement, cleaned flume and sample box, and managed water under stairs and crosswalk.
018	Performed maintenance on autosamplers and flowmeters, including repairing electrical issues, inspecting components, replacing batteries, and verifying calibration. Cleaned sample boxes and flume, added media wattles in front of check structures in spillway, and performed weed abatement.
Perimeter Pond	Performed weed abatement, changed oil at conveyance pumps, and repainted conveyance pumps.
R-2A Pond	Performed oil changes and painted the conveyance pumps, performed weed abatement, and cleaned inside the MCC.

**TABLE 4**  
**BMP ACTIVITIES, SECOND QUARTER 2025**  
 THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 NPDES PERMIT CA0001309

Outfall, Watershed, BMP, or Other Location	BMP Activities During Second Quarter 2025
<b><i>SWPPP-Related Activities (continued)</i></b>	
Area I Weather Station	Performed weed abatement.
Helipad	Removed unused Charles King pumps, cleared brush, and performed weed abatement.
Lower Lot	Performed weed abatement and removed spent wattles.
408 Yard	Continued re-building retaining walls, performed housekeeping, and performed weed abatement.
28 Tank Area	Performed weed abatement.
<b><i>Other SWPPP-Related Activities</i></b>	
Former Shooting Range	Performed BMP inspections, dragged roads and spread gravel.
Area I Burn Pit	Performed BMP inspections, installed jute netting, covered berm with felt, raised sandbag berm, and performed weed abatement along the road and conveyance lines and around the telephone poles.
STL-IV	Performed weed abatement around telephone poles, replaced spent wattles, and dragged road and spread gravel.
<b><i>Expert Panel-Related Activities</i></b>	
Culvert Modifications (CM)	Performed BMP inspections.
B-1 Area	Performed BMP inspections.
Upper Parking Lot Media Filter	Performed BMP inspections.
Former Building 1436 Bioswales	Replaced sandbags.
Lower Lot Biofilter (Sedimentation)	Performed BMP inspections.
NASA and Boeing BMP Monitoring-Related Activities	No BMP performance monitoring samples were collected in the Second Quarter 2025.

## FIGURES

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DESCRIPTIONS OF DISCHARGE OUTFALL LOCATIONS	
NPDES OUTFALL	DESCRIPTION
001	Downstream of Outfall 011; discharge to Bell Creek
002	Downstream of Outfall 018; discharge to Bell Creek
003	Runoff transferred to Silvernale for treatment prior to discharge to Outfall 018
004	Runoff transferred to Silvernale for treatment prior to discharge to Outfall 018
005	Runoff transferred to Silvernale for treatment prior to discharge to Outfall 018
006	Runoff transferred to Silvernale for treatment prior to discharge to Outfall 018
007	Runoff transferred to Silvernale for treatment prior to discharge to Outfall 018
008	Stormwater from Happy Valley; discharge to Dayton Canyon Creek
009	Stormwater from Northern Drainage; discharge to Arroyo Simi
010	Runoff transferred to Silvernale for treatment prior to discharge to Outfall 018
011	Stormwater and perimeter pond (treated at SWTS); discharge to Outfall 001
018	Stormwater and R-2 pond (treated at SWTS); discharge to Outfall 002

**NOTES**  
 ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

AILF = AREA I LANDFILL  
 APTF = ADVANCED PROPULSION TEST FACILITY  
 DOE = DEPARTMENT OF ENERGY  
 ELV = EXPENDABLE LAUNCH VEHICLE  
 GET = GROUNDWATER EXTRACTION AND TREATMENT  
 IEL = INSTRUMENT AND EQUIPMENT LABORATORIES  
 LOX = LIQUID OXYGEN  
 NASA = NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
 RMMP = RESTORATION MITIGATION MONITORING PLAN  
 RSW = RECEIVING WATER  
 SWTS = STORMWATER TREATMENT SYSTEM  
 HWMF = HAZARDOUS WASTE MANAGEMENT FACILITY  
 RMHF = RADIOACTIVE MATERIALS HANDLING FACILITY

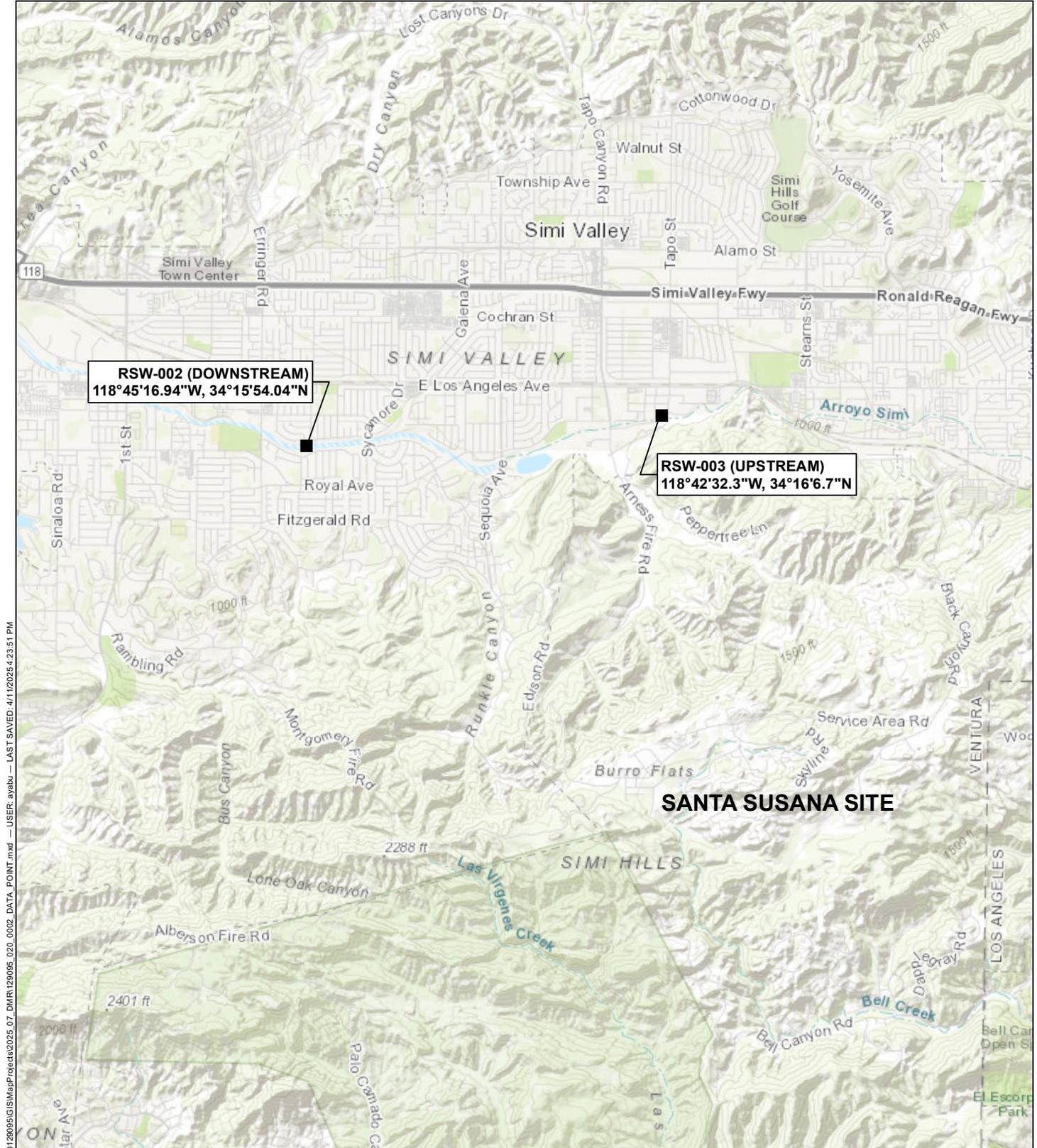
- LEGEND**
- 1 ACTIVE NPDES OUTFALL LOCATION
  - 17 FORMER NPDES OUTFALL LOCATION
  - BELL CREEK RECEIVING WATER (RSW-001) SAMPLING LOCATION AND OUTFALL 002
  - SLOPE DRAIN DISCHARGE POINT TO NORTHERN DRAINAGE
  - CULVERT MODIFICATION
  - ADMINISTRATION AREA DRAIN INLETS
  - BMP MONITORING LOCATION
  - GET SYSTEM
  - STORMWATER TREATMENT SYSTEM
  - FORMER STUDY AREA
  - RMP LOCATION
  - CHECK STRUCTURE - MOSTLY NATURAL SANDSTONE, SOME RIP RAP
  - CHECK STRUCTURE - RIP RAP
  - CHECK STRUCTURE - VEGETATED RIP RAP
  - SLOPE DRAIN WITH UNDERLYING CHECK STRUCTURE AND ENERGY DISSIPATING GRAVEL AT INFLUENT END
  - DRAINAGE
  - NORTHERN DRAINAGE
  - ASPHALT SWALE
  - PAVED ROAD
  - DIRT ROAD
  - 25' ELEVATION CONTOUR
  - VEHICLE PARKING
  - BIOFILTER
  - SEDIMENT BASIN
  - STORAGE TANK
  - BIOSWALE
  - GRAVEL
  - SURFACE WATER POND
  - EXISTING BUILDING/STRUCTURE
  - FORMER BUILDING FOOTPRINT
  - CONCRETE SLAB IN PLACE
  - LANDFILL AREA
  - SANTA SUSANA SITE PROPERTY BOUNDARY
  - ADMINISTRATIVE AREA BOUNDARY

**HALEY ALDRICH**

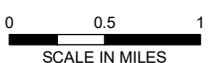
NPDES PERMIT COMPLIANCE SECOND QUARTER 2025  
 DISCHARGE MONITORING REPORT  
 THE BOEING COMPANY  
 VENTURA COUNTY, CALIFORNIA

**SITE MAP WITH STORMWATER COLLECTION AND CONVEYANCE SYSTEM AND SITE FEATURES**

AUGUST 2025 FIGURE 1



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**HALEY  
ALDRICH**

NPDES PERMIT COMPLIANCE SECOND QUARTER 2025  
DISCHARGE MONITORING REPORT  
THE BOEING COMPANY  
VENTURA COUNTY, CALIFORNIA

ARROYO SIMI RECEIVING WATER  
SAMPLING LOCATIONS  
RSW-002 (DOWNSTREAM) AND  
RSW-003 (UPSTREAM)

AUGUST 2025

**FIGURE 2**

## **APPENDIX A**

### **Rainfall Data Summary, Second Quarter 2025**

**TABLE A**  
**DAILY RAINFALL SUMMARY**  
 SECOND QUARTER 2025  
 THE BOEING COMPANY - SANTA SUSANA FIELD  
 NPDES PERMIT CA0001309

Station: AREA I  
 Parameter: Inches of Rain  
 Month/Year: April 2025

**HOUR OF THE DAY, PACIFIC STANDARD TIME**

	HR-BEG	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total
	HR-END	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
	DAY																										
D A Y  O F  T H E  M O N T H	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.19	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
	27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	28	0.00	0.00	0.00	0.00	0.00	d	d	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																										Monthly Total	0.33

Flags: d = Off-line part of hour. Invalid hour due to semiannual calibration (28 April). For the off-line event, the rain gauge at Sage Ranch did not record measurable rainfall on 28 April during hours 0600 and 0700.

**TABLE A**  
**DAILY RAINFALL SUMMARY**  
 SECOND QUARTER 2025  
 THE BOEING COMPANY - SANTA SUSANA FIELD  
 NPDES PERMIT CA0001309

Station: AREA I  
 Parameter: Inches of Rain  
 Month/Year: May 2025

**HOUR OF THE DAY, PACIFIC STANDARD TIME**

	HR-BEG	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
	HR-END	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
	DAY																										Total
D A Y  O F  T H E  M O N T H	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
	5	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00
	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																										Monthly Total	0.13

**TABLE A**  
**DAILY RAINFALL SUMMARY**  
 SECOND QUARTER 2025  
 THE BOEING COMPANY - SANTA SUSANA FIELD  
 NPDES PERMIT CA0001309

Station: AREA I  
 Parameter: Inches of Rain  
 Month/Year: June 2025

**HOUR OF THE DAY, PACIFIC STANDARD TIME**

	HR-BEG	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Total
	HR-END	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
DAY																											
D	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
O	4	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
F	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H	13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																									Monthly Total	0.12	

**APPENDIX B**

**Waste Shipment Summary Table, Second Quarter 2025**

**TABLE B**  
**WASTE SHIPMENT SUMMARY TABLE**  
 SECOND QUARTER 2025  
 THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 NPDES PERMIT CA0001309

Transported Spills						
None						

Transported Stormwater						
Type of Stormwater	Matrix	Quantity	Units	Transporter 1	Transporter 2	Destination
Non Hazardous Waste	Liquid	10,000	G	Southwest Processors, Inc. 4120 Bandini Boulevard Vernon, CA 90058	n/a	Southwest Processors, Inc. 4120 Bandini Boulevard Vernon, CA 90058

**Notes:**  
*n/a = Not Applicable*  
*G = Gallons*

## **APPENDIX C**

### **Discharge Monitoring Data Summary Tables, Second Quarter 2025**

**APPENDIX C**

**TABLE OF CONTENTS**

Reporting Summary Notes

C-3. Arroyo Simi Receiving Waters

C-3.A. RSW-002 (Downstream)

C-3.B. RSW-002 (Downstream Sediment)

**REPORTING SUMMARY NOTES  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**Not all the following notes, abbreviations, symbols, or acronyms occur on every table:**

1. Exceedances are constituents detected in excess of daily maximum permit limits or receiving water limits. Analytical concentrations or calculations to determine compliance to the National Pollutant Discharge Elimination System (NPDES) permit are compared to the same number of significant figures as the daily maximum permit limits or receiving water limits.
2. Dissolved metals are filtered by the laboratory and reported as “Metal, dissolved”. Total metals are not filtered by the laboratory and reported as “Metal”.
3. If the laboratory reported multiple analytical results for the same analyte, the table shows the result with the lowest reporting limit.
4. Abbreviations, symbols, and acronyms:

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition. Radiological results are presented as activity plus or minus total uncertainty.
%	Percent.
\$	Reported result or other information was incorrectly reported by the laboratory; result was corrected by the data validator.
--	Based on validation of the data, a qualifier was not required.
-	No NPDES permit limit established for daily maximum or receiving water limit.
>(value)	Greater than most probable number.
*	Result not validated.
**	Flow for each outfall is calculated over the 24-hour period when the outfall autosampler is operating to collect the composite sample. See definition of “Daily Discharge” on page A-1 of attachment A of the 2023 NPDES permit.
*1	Improper preservation of sample.
*3	Initial and or continuing calibration recoveries were outside acceptable control limits.
*10	Value was estimated detect or estimated non-detect (J, UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as estimated maximum possible concentration (EMPC) values.
*III	Unusual problems found with the data that have been described in the validation report.
ANR	Analysis not required; e.g., constituent or outfall was not required by the NPDES permit to be sampled and analyzed over the reporting period (annual, semi- annual, etc.).
B	Presumed contamination as indicated by the preparation (method) blank results.
BEF	Bioaccumulation equivalency factor.
C	Calibration %RSD or %D was noncompliant or Correlation coefficient is <0.995.
Comp	Composite sample.
CEs/100 ml	Cell equivalents per 100 milliliters.
D	The analysis with this flag should not be used because another more technically sound analysis is available.
Deg C	Degrees Celsius.

**REPORTING SUMMARY NOTES  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

Deg F	Degrees Fahrenheit.
DL	Detection limit.
DNQ	Detected but not quantified (constituent value greater than or equal to the laboratory method detection limit and less than the laboratory reporting limit).
E	E in validation qualifier indicates that duplicates show poor agreement.
F	The analyte was detected in an associated field blank (FB) or equipment blank (EB) as well as in the sample.
FB	Field blank.
ft/sec	Feet per second.
gpd	Gallons per day.
H	Holding time was exceeded.
I	Internal standard performance was unsatisfactory.
J	Estimated value.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
L	Laboratory control standard (LCS)/laboratory control standard duplicate (LCSD), relative percent difference (RPD) was outside the control limit.
LBS/DAY	Pounds per day.
MDL	Method detection limit.
Meas	Measure sample type.
MFL	Million fibers per liter.
MGD	Million gallons per day.
mg/L	Milligrams per liter.
mg/kg	Milligrams per kilogram.
ml/L	Milliliters per liter.
ml/L/hr	Milliliters per liter per hour.
MPN/100 mL	Most probable number per 100 milliliters.
MQL	Method quantitation limit.
MS	Matrix spike.
MSD	Matrix spike duplicate.
mS/cm	MilliSiemens per centimeter.
NA	Not applicable (i.e., NPDES permit limit not established for the constituent and/or outfall or analyte not required per receiving water monitoring requirements.)
ND	Analyte not detected.
ng/L	Nanograms per liter.
NM	Not measured or determined or minimum detectable activities (MDAs) are not calculated as there is no statistical method for combining MDAs.
NOEC	No observed effect concentration
NPDES	National Pollutant Discharge Elimination System.
NR	Not reported by laboratory by the deadline of this report.
NTU	Nephelometric turbidity unit.
ppb	Parts per billion.

**REPORTING SUMMARY NOTES  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

pCi/L	PicoCuries per liter.
Q	Matrix spike (MS)/matrix spike duplicate (MSD) relative percent difference (RPD) was outside the control limit.
R	As a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified.
(R)	Percent recovery (%R) for calibration not within control limits.
RL	Laboratory reporting limit.
RPD	Relative percent difference.
%R	Percent recovery.
S	Surrogate recovery was outside control limits.
s.u.	Standard unit.
TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin.
TEQ	Toxic equivalent.
TIC	Tentatively identified compound
TIE	Toxicity identification evaluation
T	Presumed contamination, as indicated by a detect in the trip blank.
U	Result not detected.
µg/L	Micrograms per liter.
µg/g	Micrograms per gram.
µg/kg	Micrograms per kilogram.
µmhos/cm	Micromhos per centimeter.
UJ	Result not detected at the estimated reporting limit.
WHO TEF	World Health Organization toxic equivalency factor.
(a)	Analysis not completed due to hold time exceedance or insufficient sample volume.
(b)	The composite sample was collected as a grab sample from the stream due to insufficient flow.
(c)	Total Ammonia is reported in wet weight units' milligrams per kilogram (mg/kg).
(d)	Total organic carbon (TOC) is reported in dry weight units. Permit asks for TOC units in % dry weight, but data is provided in dry unit milligrams per kilogram (mg/kg).
(e)	The composite sample was collected as a grab sample from the sample box due to insufficient flow.
(f)	The grab sample was collected at the first opportunity given the short duration and low flow at this Outfall.
(g)	Unsafe conditions all day prevented access to the Outfall.
(h)	Various constituents were analyzed by laboratory due to field and laboratory error.
(i)	Reanalysis.
(j)	Sample collected in addition to NPDES permit required sampling frequency.
(k)	Composite sample collected from sample box due to cracked autosampler tubing resulting in low volume recovery.
(l)	Various field parameter(s) analyzed out of hold time due to field and/or laboratory error.
(m)	Analysis performed on composite sample instead of grab sample due to field error.

**REPORTING SUMMARY NOTES  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

(n)	Permit limit does not apply to receiving water.
(o)	Analyte was reported as a TIC.
(p)	Particle size distribution is reported in percent units. Permit asks for particle size distribution units in $\mu\text{m}$ , but data is provided in percent (%).
(q)	The Discharger has the option to meet the hexavalent chromium limitations with a total chromium analysis. However, if the total chromium level exceeds the hexavalent chromium limitation, it will be considered a violation unless an analysis has been made for hexavalent chromium in a replicate sample and the result reported is within the hexavalent chromium limits.
(r)	Statistical Threshold Value (STV): E. coli density shall not exceed 320 cfu or MPN/100mL by more than 10 percent of the samples collected in a calendar month, calculated in a static manner.

ANALYTE	SAMPLE TYPE	UNITS	METHOD	ML	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	LOCATION	RSW-002		
							DATE RANGE	RESULT	MDL	RL
								6/12/2025 8:15:00 AM		
4,4'-DDD	Grab	µg/L	E608.3	0.05	-	1/Quarter	ND	0.014	0.025	U *
4,4'-DDE	Grab	µg/L	E608.3	0.05	-	1/Quarter	ND	0.018	0.025	U *
4,4'-DDT	Grab	µg/L	E608.3	0.01	-	1/Quarter	ND	0.014	0.025	U *
Aroclor 1016	Grab	µg/L	E608.3	0.5	-	1/Quarter	ND	1	2.5	U *
Aroclor 1221	Grab	µg/L	E608.3	0.5	-	1/Quarter	ND	1	2.5	U *
Aroclor 1232	Grab	µg/L	E608.3	0.5	-	1/Quarter	ND	1	2.5	U *
Aroclor 1242	Grab	µg/L	E608.3	0.5	-	1/Quarter	ND	1	2.5	U *
Aroclor 1248	Grab	µg/L	E608.3	0.5	-	1/Quarter	ND	1	2.5	U *
Aroclor 1254	Grab	µg/L	E608.3	0.5	-	1/Quarter	ND	1	2.5	U *
Aroclor 1260	Grab	µg/L	E608.3	0.5	-	1/Quarter	ND	1	2.5	U *
Chlordane	Grab	µg/L	E608.3	0.1	-	1/Quarter	ND	0.22	0.5	U *
Chlorpyrifos	Grab	µg/L	E625.1	-	0.014	1/Quarter	ND	0.0040	0.010	U *
Diazinon	Grab	µg/L	E625.1	-	0.010	1/Quarter	ND	0.0034	0.010	U *
Dieldrin	Grab	µg/L	E608.3	0.01	-	1/Quarter	ND	0.0085	0.025	U *
Hardness (as CaCO3)	Grab	mg/L	SM2340	-	-	1/Quarter	640	0.5	7.1	*
pH (Field)	Grab	s.u.	FIELDPARAM	-	6.5-8.5	1/Quarter	7.39	NM	NM	*
Temperature (Field)	Grab	Deg F	FIELDPARAM	-	80	1/Quarter	71.8	NM	NM	*
Toxaphene	Grab	µg/L	E608.3	0.5	-	1/Quarter	ND	2.5	2.5	U *
Water Velocity	Grab	ft/sec	FIELDPARAM	-	-	1/Quarter	0.0	NM	NM	*

TABLE C-3.B

RSW-002 (DOWNSTREAM SEDIMENT)  
 SECOND QUARTER 2025  
 THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 NPDES PERMIT CA0001309

ANALYTE	UNITS	METHOD	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	LOCATION	RSW-002			LAB/ VALIDATION QUALIFIER
					DATE RANGE	6/12/2025 8:45			
					RESULT	MDL	RL		
4,4'-DDD	µg/g	SW8081A	0.002	1/Year	ND	0.00014	0.001	U *	
4,4'-DDE	µg/g	SW8081A	0.0014	1/Year	ND	0.00014	0.001	U *	
4,4'-DDT	µg/g	SW8081A	0.0003	1/Year	ND	0.00023	0.001	U *	
Ammonia <sup>(c)</sup>	mg/kg	SM4500-NH3C	-	1/Year	ND	83.0	100	U *	
Aroclor-1016 (PCB-1016)	µg/g	SW8082	0.12	1/Year	ND	0.0078	0.01	U *	
Aroclor-1221 (PCB-1221)	µg/g	SW8082	0.12	1/Year	ND	0.0078	0.01	U *	
Aroclor-1232 (PCB-1232)	µg/g	SW8082	0.12	1/Year	ND	0.0078	0.01	U *	
Aroclor-1242 (PCB-1242)	µg/g	SW8082	0.12	1/Year	ND	0.0078	0.01	U *	
Aroclor-1248 (PCB-1248)	µg/g	SW8082	0.12	1/Year	ND	0.0078	0.01	U *	
Aroclor-1254 (PCB-1254)	µg/g	SW8082	0.12	1/Year	ND	0.0051	0.01	U *	
Aroclor-1260 (PCB-1260)	µg/g	SW8082	0.12	1/Year	ND	0.0051	0.01	U *	
Chlordane	µg/g	SW8081A	0.0033	1/Year	ND	0.00082	0.005	U *	
Bivalve Embryo Toxicity (Mytilus edulis)	% NOEC	EPA/600/R-95/136	-	1/Year	100	NM	NM	*	
Conductivity, Field	umhos/cm	FIELDPARAM	-	1/Year	1,790	NM	NM	*	
Dieldrin	µg/g	SW8081A	0.0002	1/Year	ND	0.00011	0.0002	U *	
Dissolved Oxygen, Field	mg/L	FIELDPARAM	-	1/Year	0.19	NM	NM	*	
Flow Rate (Velocity)	ft/sec	FIELDPARAM	-	1/Year	0.0	NM	NM	*	
Percent Moisture	%	SM2540G	-	1/Year	19	0.10	0.10	*	
pH, Field	s.u.	FIELDPARAM	-	1/Year	7.39	NM	NM	*	
Sediment Toxicity (Eohaustorius estuarius)	% Survival	EPA/600/R-94/025	-	1/Year	100	NM	NM	*	
Temperature, Field	Deg F	FIELDPARAM	-	1/Year	71.8	NM	NM	*	
Total Organic Carbon (TOC) <sup>(d)</sup>	mg/kg	SW9060A	-	1/Year	2,000	340	500	*	
Toxaphene	µg/g	SW8081A	0.0006	1/Year	ND	0.0031	0.005	U *	
Grain Size									
Clay (<0.00391 mm) <sup>(p)</sup>	%	D4464	-	1/Year	ND	0.01	0.01	U *	
Coarse Sand (0.5 to 1mm), Wentworth <sup>(p)</sup>	%	D4464	-	1/Year	31.38	0.01	0.01	*	
Fine Sand (0.125 to 0.25mm), Wentworth <sup>(p)</sup>	%	D4464	-	1/Year	2.45	0.01	0.01	*	
Gravel (greater than 2mm), Wentworth <sup>(p)</sup>	%	D4464	-	1/Year	49.92	0.01	0.01	*	
Medium Sand (0.25 to 0.5mm), Wentworth <sup>(p)</sup>	%	D4464	-	1/Year	12.93	0.01	0.01	*	
Silt (0.00391 to 0.0625mm) <sup>(p)</sup>	%	D4464	-	1/Year	ND	0.01	0.01	U *	
Total Silt And Clay (0 to 0.0626mm) <sup>(p)</sup>	%	D4464	-	1/Year	ND	0.01	0.01	U *	
Very Coarse Sand (1 to 2mm) <sup>(p)</sup>	%	D4464	-	1/Year	3.14	0.01	0.01	*	
Very Fine Sand (0.0625 to 0.125 mm) <sup>(p)</sup>	%	D4464	-	1/Year	0.19	0.01	0.01	*	

**APPENDIX D**

**Toxicity Laboratory Reports and Validation Reports,**

**Second Quarter 2025**

**APPENDIX D**

**TABLE OF CONTENTS**

<b>Number</b>	<b>Outfall/Location</b>	<b>Toxicity Laboratory Report Number</b>	<b>Sampling Date</b>
1	Arroyo Simi (Downstream Sediment)	570-234309-1	June 12, 2025



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Katherine Miller  
Haley & Aldrich, Inc.  
201 E. Washington St.  
Suite 1795  
Phoenix, Arizona 85004

Generated 7/2/2025 8:32:37 PM

## JOB DESCRIPTION

Annual Sediment RSW-002 Arroyo Simi-Downstream

## JOB NUMBER

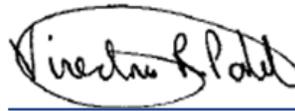
570-234309-2

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Calscience Project Manager.

## Authorization



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7/2/2025 8:32:37 PM

Authorized for release by  
Virendra Patel, Project Manager I  
[Virendra.Patel@et.eurofinsus.com](mailto:Virendra.Patel@et.eurofinsus.com)  
(714)895-5494



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# Definitions/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: Annual Sediment RSW-002 Arroyo  
Simi-Downstream

Job ID: 570-234309-2

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Haley & Aldrich, Inc.  
Project: Annual Sediment RSW-002 Arroyo Simi-Downstream

Job ID: 570-234309-2

**Job ID: 570-234309-2**

**Eurofins Calscience**

## Job Narrative 570-234309-2

### Receipt

The sample was received on 6/12/2025 5:30 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.6° C.

### Lab Admin

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

### Subcontract Work

Methods 48-hour Bivalve Embryo toxicity *Mytilus edulis* or *Crassostrea gigas*, Bioassay-Chronic 10 day eohaustorius: These methods were subcontracted to Aquatic Bioassay. The subcontract laboratory certifications are different from that of the facility issuing the final report. The subcontract report is appended in its entirety.



# Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Annual Sediment RSW-002 Arroyo  
Simi-Downstream

Job ID: 570-234309-2

Method	Method Description	Protocol	Laboratory
Subcontract	48-hour Bivalve Embryo toxicity <i>Mytilus edulis</i> or <i>Crassostrea gigas</i>	None	Aquatic
Subcontract	Bioassay-Chronic 10 day eohaustorius	None	Aquatic

**Protocol References:**

None = None

**Laboratory References:**

Aquatic = Aquatic Bioassay & Consulting, 29 North Olive Street, Ventura, CA 93001



# Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Annual Sediment RSW-002 Arroyo  
Simi-Downstream

Job ID: 570-234309-2

---

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
570-234309-1	RSW-002_Sed_20250612	Solid	06/12/25 08:45	06/12/25 17:30

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8



**AQUATIC BIOASSAY**  
 & CONSULTING LABORATORIES, INC.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

July 2, 2025

Mr. Virendra Patel  
 Eurofins Calscience LLC  
 2841 Dow Avenue, Suite 100  
 Tustin, CA 92780

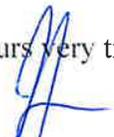
Dear Mr. Patel:

We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods*, EPA/600/R-94/025. Results were as follows:

CLIENT:	Eurofins Calscience LLC
SAMPLE I.D.:	RSW-002_Sed_20250612
DATE RECEIVED:	6/12/2025
ABC LAB. NO.:	CSE00625.184

***Eohaustorius estuarius* 10 Day Survival Sediment Bioassay**

Percent Survival = 100.00% Survival

Yours very truly,  
  
 Joe Freas  
 President

# CETIS Summary Report

Report Date: 02 Jul-25 16:33 (p 1 of 1)  
 Test Code/ID: CSE0624.184 / 08-1581-9131

Eohaustorius 10-d Survival and Reburial Sediment Test Aquatic Bioassay & Consulting Labs, Inc.

<b>Batch ID:</b> 07-2600-4628	<b>Test Type:</b> Survival-Reburial	<b>Analyst:</b>
<b>Start Date:</b> 20 Jun-25 13:10	<b>Protocol:</b> EPA/600/R-94/025 (1994)	<b>Diluent:</b> Laboratory Seawater
<b>Ending Date:</b> 30 Jun-25 13:20	<b>Species:</b> Eohaustorius estuarius	<b>Brine:</b> Not Applicable
<b>Test Length:</b> 10d 0h	<b>Taxon:</b> Malacostraca	<b>Source:</b> Northwestern Aquatic Scien Age:
<b>Sample ID:</b> 10-1506-0004	<b>Code:</b> CSE0624.184	<b>Project:</b> Boeing SSFL NPDES
<b>Sample Date:</b> 12 Jun-25 08:45	<b>Material:</b> Sediment	<b>Source:</b> Bioassay Report
<b>Receipt Date:</b> 12 Jun-25 11:48	<b>CAS (PC):</b>	<b>Station:</b> RSW-002_Sed_20240613
<b>Sample Age:</b> 8d 4h	<b>Client:</b> Eurofins Calscience	

## Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
03-0224-1663	Survival Rate	Wilcoxon Rank Sum Two-Sample Test	1.0000	100% passed survival rate

## Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
100		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%

## Survival Rate Detail

MD5: D2BA4081DAD0A69D634823731B2DEACB

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.0000	1.0000	1.0000	1.0000	1.0000
100		1.0000	1.0000	1.0000	1.0000	1.0000

## Survival Rate Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	20/20	20/20	20/20	20/20	20/20
100		20/20	20/20	20/20	20/20	20/20

**CETIS Analytical Report**

Report Date: 02 Jul-25 16:33 (p 1 of 1)  
 Test Code/ID: CSE0624.184 / 08-1581-9131

**Eohaustorius 10-d Survival and Reburial Sediment Test** **Aquatic Bioassay & Consulting Labs, Inc.**

<b>Analysis ID:</b> 03-0224-1663	<b>Endpoint:</b> Survival Rate	<b>CETIS Version:</b> CETIS v2.1.5
<b>Analyzed:</b> 02 Jul-25 16:32	<b>Analysis:</b> Nonparametric-Two Sample	<b>Status Level:</b> 1
<b>Edit Date:</b> 02 Jul-25 0:00	<b>MD5 Hash:</b> D2BA4081DAD0A69D634823731B2DEACB	<b>Editor ID:</b> 001-083-753-2
<b>Batch ID:</b> 07-2600-4628	<b>Test Type:</b> Survival-Reburial	<b>Analyst:</b>
<b>Start Date:</b> 20 Jun-25 13:10	<b>Protocol:</b> EPA/600/R-94/025 (1994)	<b>Diluent:</b> Laboratory Seawater
<b>Ending Date:</b> 30 Jun-25 13:20	<b>Species:</b> Eohaustorius estuarius	<b>Brine:</b> Not Applicable
<b>Test Length:</b> 10d 0h	<b>Taxon:</b> Malacostraca	<b>Source:</b> Northwestern Aquatic Scien Age:
<b>Sample ID:</b> 10-1506-0004	<b>Code:</b> CSE0624.184	<b>Project:</b> Boeing SSFL NPDES
<b>Sample Date:</b> 12 Jun-25 08:45	<b>Material:</b> Sediment	<b>Source:</b> Bioassay Report
<b>Receipt Date:</b> 12 Jun-25 11:48	<b>CAS (PC):</b>	<b>Station:</b> RSW-002_Sed_20240613
<b>Sample Age:</b> 8d 4h	<b>Client:</b> Eurofins Calscience	

Data Transform	Alt Hyp	Comparison Result
Angular (Corrected)	C > T	100% passed survival rate endpoint

**Wilcoxon Rank Sum Two-Sample Test**

Control	vs	Conc-%	df	Test Stat	Critical	Ties	P-Type	P-Value	Decision(α:5%)
Negative Control		100	8	27.5	---	1	Exact	1.0000	Non-Significant Effect

**ANOVA Table**

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0	0	1			Indeterminate
Error	0	0	8			
Total	0		9			

**ANOVA Assumptions Tests**

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Variance Ratio F Test				Indeterminate
Distribution	Shapiro-Wilk W Normality Test				Indeterminate

# CETIS Measurement Report

Report Date: 02 Jul-25 16:33 (p 1 of 2)  
 Test Code/ID: CSE0624.184 / 08-1581-9131

Eohaustorius 10-d Survival and Reburial Sediment Test				Aquatic Bioassay & Consulting Labs, Inc.			
Batch ID:	07-2600-4628	Test Type:	Survival-Reburial	Analyst:			
Start Date:	20 Jun-25 13:10	Protocol:	EPA/600/R-94/025 (1994)	Diluent:	Laboratory Seawater		
Ending Date:	30 Jun-25 13:20	Species:	Eohaustorius estuarius	Brine:	Not Applicable		
Test Length:	10d 0h	Taxon:	Malacostraca	Source:	Northwestern Aquatic Scien Age:		
Sample ID:	10-1506-0004	Code:	CSE0624.184	Project:	Boeing SSFL NPDES		
Sample Date:	12 Jun-25 08:45	Material:	Sediment	Source:	Bioassay Report		
Receipt Date:	12 Jun-25 11:48	CAS (PC):		Station:	RSW-002_Sed_20240613		
Sample Age:	8d 4h	Client:	Eurofins Calscience				

Dissolved Oxygen-mg/L											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	9.7	7.159	12.24	9.5	9.9	0.1414	0.2828	2.92%	0
100		2	9.8	8.529	11.07	9.7	9.9	0.07071	0.1414	1.44%	0
Overall		4	9.75	9.445	10.05	9.5	9.9	0.09574	0.1915	1.96%	0 (0%)

Total Ammonia (N)-mg/L											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	1	0	---	---	0	0	---	---	---	0
100		1	0	---	---	0	0	---	---	---	0
Overall		2	0	0	0	0	0	0	0	#Num!	0 (0%)

pH-Units											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
100		2	7.85	7.215	8.485	7.8	7.9	0.03535	0.07071	0.90%	0
Overall		4	7.875	7.795	7.955	7.8	7.9	0.025	0.05	0.63%	0 (0%)

Salinity-ppt											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	20	20	20	20	20	0	0	0.00%	0
100		2	20	20	20	20	20	0	0	0.00%	0
Overall		4	20	20	20	20	20	0	0	0.00%	0 (0%)

Temperature-°C											
Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
100		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
Overall		4	14.85	14.76	14.94	14.8	14.9	0.02887	0.05773	0.39%	0 (0%)



**CETIS Measurement Report**

Report Date: 02 Jul-25 16:33 (p 2 of 2)  
 Test Code/ID: CSE0624,184 / 08-1581-9131

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

**Eohaustorius 10-d Survival and Reburial Sediment Test**

**Aquatic Bioassay & Consulting Labs, Inc.**

**Dissolved Oxygen-mg/L**

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		9.9					
100				9.7					
0	N	2		9.5					
100				9.9					

**Total Ammonia (N)-mg/L**

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		0					
100				0					

**pH-Units**

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.9					
100				7.9					
0	N	2		7.9					
100				7.8					

**Salinity-ppt**

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		20					
100				20					
0	N	2		20					
100				20					

**Temperature-°C**

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		14.8					
100				14.8					
0	N	2		14.9					
100				14.9					



**AQUATIC BIOASSAY**  
 & CONSULTING LABORATORIES, INC.



July 2, 2025

Mr. Virendra Patel  
 Eurofins Calscience LLC  
 2841 Dow Avenue, Suite 100  
 Tustin, CA 92780

Dear Mr. Patel:

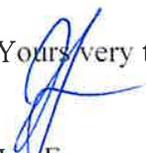
We are pleased to present the enclosed bioassay report. The test was conducted under guidelines prescribed in *Short-Term Methods for Measuring the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms, EPA/R-95/136*. Results were as follows:

CLIENT:	Eurofins Calscience LLC
SAMPLE I.D.:	RSW-002_Sed_20250612
DATE RECEIVED:	6/12/2025
ABC LAB. NO.:	CSE0612.184

**CHRONIC MYTILUS SEDIMENT WATER INTERFACE BIOASSAY**

NOEC =	100.00 %
TUc =	1.00
EC25 =	>100.00 %
EC50 =	>100.00 %

Yours very truly,

  
 Joe Freas  
 President

# CETIS Summary Report

Report Date: 02 Jul-25 13:54 (p 1 of 1)  
 Test Code/ID: CSE0625.184mg / 09-8042-2978

## Mussel Shell Development Test

Aquatic Bioassay & Consulting Labs, Inc.

<b>Batch ID:</b> 08-7769-5608	<b>Test Type:</b> Development-Survival	<b>Analyst:</b> Joe Freas
<b>Start Date:</b> 17 Jun-25 13:20	<b>Protocol:</b> EPA/600/R-95/136 (1995)	<b>Diluent:</b> Laboratory Water
<b>Ending Date:</b> 19 Jun-25 19:20	<b>Species:</b> Mytilus galloprovincialis	<b>Brine:</b> Not Applicable
<b>Test Length:</b> 54h	<b>Taxon:</b> Bivalvia	<b>Source:</b> Carlsbad Aquafarms CA <b>Age:</b>
<b>Sample ID:</b> 08-9728-5238	<b>Code:</b> CSE0625.184mg	<b>Project:</b> Boeing SSFL NPDES
<b>Sample Date:</b> 12 Jun-25 08:45	<b>Material:</b> Sample Water	<b>Source:</b> Bioassay Report
<b>Receipt Date:</b> 12 Jun-25 11:48	<b>CAS (PC):</b>	<b>Station:</b> RSW-002_Sed_20250612
<b>Sample Age:</b> 5d 5h (4 °C)	<b>Client:</b> Eurofins Calscience	

## Single Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result
16-4260-5026	Combined Proportion Normal	Equal Variance t Two-Sample Test	0.9901	100% passed combined proportion normal

## Combined Proportion Normal Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	5	0.9647	0.9519	0.9775	0.9548	0.9774	0.0046	0.0103	1.07%	0.00%
100		5	0.9837	0.9721	0.9954	0.9729	0.9955	0.0042	0.0094	0.95%	-1.97%

## Combined Proportion Normal Detail

MD5: 325945141C5B9F8BE98BDA4D6CC38E7C

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9548	0.9638	0.9729	0.9774	0.9548
100		0.9910	0.9955	0.9819	0.9729	0.9774

## Combined Proportion Normal Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	211/221	213/221	215/221	216/221	211/221
100		219/221	220/221	217/221	215/221	216/221

**CETIS Analytical Report**

Report Date: 02 Jul-25 13:54 (p 1 of 2)  
 Test Code/ID: CSE0625.184mg / 09-8042-2978

**Mussel Shell Development Test**

**Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID: 16-4260-5026      Endpoint: Combined Proportion Normal      CETIS Version: CETIS v2.1.5  
 Analyzed: 02 Jul-25 13:54      Analysis: Parametric-Two Sample      Status Level: 1  
 Edit Date: 02 Jul-25 0:00      MD5 Hash: 325945141C5B9F8BE98BDA4D6CC38E7C      Editor ID: 001-083-753-2

Batch ID: 08-7769-5608      Test Type: Development-Survival      Analyst: Joe Freas  
 Start Date: 17 Jun-25 13:20      Protocol: EPA/600/R-95/136 (1995)      Diluent: Laboratory Water  
 Ending Date: 19 Jun-25 19:20      Species: Mytilus galloprovincialis      Brine: Not Applicable  
 Test Length: 54h      Taxon: Bivalvia      Source: Carlsbad Aquafarms CA      Age:

Sample ID: 08-9728-5238      Code: CSE0625.184mg      Project: Boeing SSFL NPDES  
 Sample Date: 12 Jun-25 08:45      Material: Sample Water      Source: Bioassay Report  
 Receipt Date: 12 Jun-25 11:48      CAS (PC):      Station: RSW-002\_Sed\_20250612  
 Sample Age: 5d 5h (4 °C)      Client: Eurofins Calscience

Data Transform	Alt Hyp	Comparison Result	PMSD
Angular (Corrected)	C > T	100% passed combined proportion normal endpoint	1.67%

**Equal Variance t Two-Sample Test**

Control	vs	Conc-%	df	Test Stat	Critical	MSD	P-Type	P-Value	Decision(α:5%)
Negative Control		100	8	-2.903	1.86	0.04132	CDF	0.9901	Non-Significant Effect

**ANOVA Table**

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.0104072	0.0104072	1	8.429	0.0198	Significant Effect
Error	0.0098771	0.0012346	8			
Total	0.0202844		9			

**ANOVA Assumptions Tests**

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Levene Equality of Variance Test	1.195	11.26	0.3061	Equal Variances
	Mod Levene Equality of Variance Test	0.8023	13.75	0.4049	Equal Variances
	Variance Ratio F Test	2.017	23.15	0.5135	Equal Variances
Distribution	Anderson-Darling A2 Test	0.4344	3.878	0.3053	Normal Distribution
	D'Agostino Skewness Test	0.6226	2.576	0.5336	Normal Distribution
	Kolmogorov-Smirnov D Test	0.1927	0.3025	0.4026	Normal Distribution
	Shapiro-Wilk W Normality Test	0.9249	0.7411	0.4000	Normal Distribution

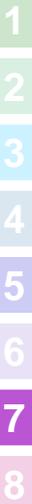
# CETIS Analytical Report

Report Date: 02 Jul-25 13:54 (p 2 of 2)  
Test Code/ID: CSE0625.184mg / 09-8042-2978

## Mussel Shell Development Test

Aquatic Bioassay & Consulting Labs, Inc.

<b>Analysis ID:</b> 16-4260-5026	<b>Endpoint:</b> Combined Proportion Normal	<b>CETIS Version:</b> CETIS v2.1.5
<b>Analyzed:</b> 02 Jul-25 13:54	<b>Analysis:</b> Parametric-Two Sample	<b>Status Level:</b> 1
<b>Edit Date:</b> 02 Jul-25 0:00	<b>MD5 Hash:</b> 325945141C5B9F8BE98BDA4D6CC38E7C	<b>Editor ID:</b> 001-083-753-2



# CETIS Measurement Report

Report Date: 02 Jul-25 13:54 (p 1 of 2)  
 Test Code/ID: CSE0625.184mg / 09-8042-2978

## Mussel Shell Development Test

Aquatic Bioassay & Consulting Labs, Inc.

<b>Batch ID:</b> 08-7769-5608	<b>Test Type:</b> Development-Survival	<b>Analyst:</b> Joe Freas
<b>Start Date:</b> 17 Jun-25 13:20	<b>Protocol:</b> EPA/600/R-95/136 (1995)	<b>Diluent:</b> Laboratory Water
<b>Ending Date:</b> 19 Jun-25 19:20	<b>Species:</b> Mytilus galloprovincialis	<b>Brine:</b> Not Applicable
<b>Test Length:</b> 54h	<b>Taxon:</b> Bivalvia	<b>Source:</b> Carlsbad Aquafarms CA <b>Age:</b>
<b>Sample ID:</b> 08-9728-5238	<b>Code:</b> CSE0625.184mg	<b>Project:</b> Boeing SSFL NPDES
<b>Sample Date:</b> 12 Jun-25 08:45	<b>Material:</b> Sample Water	<b>Source:</b> Bioassay Report
<b>Receipt Date:</b> 12 Jun-25 11:48	<b>CAS (PC):</b>	<b>Station:</b> RSW-002_Sed_20250612
<b>Sample Age:</b> 5d 5h (4 °C)	<b>Client:</b> Eurofins Calscience	

### Dissolved Oxygen-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	6.75	4.844	8.656	6.6	6.9	0.1061	0.2121	3.14%	0
100		2	6.85	6.215	7.485	6.8	6.9	0.03535	0.0707	1.03%	0
Overall		4	6.8	6.575	7.025	6.6	6.9	0.07071	0.1414	2.08%	0 (0%)

### Total Ammonia (N)-mg/L

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	1	0	---	---	0	0	---	---	---	0
100		1	0	---	---	0	0	---	---	---	0
Overall		2	0	0	0	0	0	0	0	#Num!	0 (0%)

### pH-Units

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
100		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
Overall		4	7.9	7.9	7.9	7.9	7.9	0	0	0.00%	0 (0%)

### Salinity-ppt

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	34	34	34	34	34	0	0	0.00%	0
100		2	34	34	34	34	34	0	0	0.00%	0
Overall		4	34	34	34	34	34	0	0	0.00%	0 (0%)

### Temperature-°C

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	14.8	14.78	14.82	14.8	14.8	0	0	0.00%	0
100		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
Overall		4	14.83	14.75	14.9	14.8	14.9	0.025	0.05	0.34%	0 (0%)

# CETIS Measurement Report

Report Date: 02 Jul-25 13:54 (p 2 of 2)  
 Test Code/ID: CSE0625.184mg / 09-8042-2978

## Mussel Shell Development Test

Aquatic Bioassay & Consulting Labs, Inc.

### Dissolved Oxygen-mg/L

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		6.6					
100				6.8					
0	N	2		6.9					
100				6.9					

### Total Ammonia (N)-mg/L

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		0					
100				0					

### pH-Units

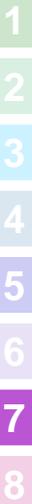
Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.9					
100				7.9					
0	N	2		7.9					
100				7.9					

### Salinity-ppt

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		34					
100				34					
0	N	2		34					
100				34					

### Temperature-°C

Conc-%	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		14.8					
100				14.8					
0	N	2		14.8					
100				14.9					



CHAIN OF CUSTODY FORM

Eurofins Calscience Irvine

<p><b>Client Name/Address:</b>                  Haley &amp; Aldrich                  5333 Mission Center Rd Suite 300                  San Diego, CA 92108                  Eurofins Calscience Project Manager: Virendra Patel                  2841 Dow Avenue, Suite #100                  Tustin, CA 92780                  Tel: 714-895-5494                  ECI Project #57013187</p>		<p><b>Project:</b>                  Boeing-SSFL NPDES                  Permit 2023                  Annual Sediment RSW-002                  Arroyo Simi-Downstream</p>		<p><b>Project Manager:</b> Katherine Miller                  520.289.8606, 520.904.6944 (cell)</p>		<p><b>Field Manager:</b> Mark Dominick                  978.234.5033, 818.599.0702 (cell)</p>		<p><b>Field Readings:</b>                  Time of readings: 0805                  pH: 7.37 pH unit                  Temp: 77.8 °C/F                  DO: 0.19 mg/L                  Conductivity: 179.2 µmhos/cm                  Velocity: 0.0 ft/sec                  Meter serial #</p>									
<p><b>Sample Description:</b>                  Arroyo Simi</p>		<p>Sample Matrix: SE</p>	<p>Sampling Date/Time: 6/12/2025 10:45</p>	<p>Container Type: 9 oz Jar</p>	<p># of Cont: 1</p>	<p>Preservative: None</p>	<p>M/MSD: No</p>	<p><b>ANALYSIS REQUIRED</b></p>		<p><b>Field Readings:</b>                  Field readings QC                  Checked by: [Signature]                  Date/Time: 6-12-25/0805</p>							
									<p>Total Ammonia (SM450-NH3-D) X</p>	<p>Total Organic Carbon (9060)</p>	<p>PCBs (SW8082)</p>	<p>Chlordane, Dieldrin, Toxaphene, 4,4-DD, 4,4-DE, 4,4-DDT (SW8081A)</p>	<p>48-hour Bivalve Embryo Toxicity (Mytilus edulis or Crassostrea gigas) (EPA-95/136) ABC Labs in Ventura, CA</p>	<p>Chronic 10-day eohausiorlus estuarinus Toxicity (EPA/600/R-94/025) ABC Labs in Ventura, CA</p>	<p>% Moisture (2540G)</p>	<p>Particle Size Distribution (D422M)</p>	<p>Comments:                  Deliver to ABC Labs in Ventura, CA                  Keep sample in cooler in the dark until delivered to ABC Labs                  CSEOWAS. 184                  Added C.F. = 2.1                  Therm. = sample receiving                  Temp. deg. C. = 1.1                  Chlorine (mg/L) = 3.1                  NH3 (mg/L) = 1.10</p>
<p><i>* Sample delivered to Analytic Biosciences via Dry Ice. This copy is for ECI.</i></p>																	
<p><b>Relinquished by:</b>                  [Signature]                  Date/Time: 6-12-25/1148</p>		<p><b>Company:</b>                  H.A.A.</p>		<p><b>Received by:</b>                  [Signature]                  Date/Time: 6/12/25 1148</p>		<p><b>Company:</b>                  ABCO</p>		<p><b>Legend: A=Annual</b></p>		<p><b>Turn-around time: (Check)</b>                  24 Hour: ___ 72 Hour: ___ 10 Day: ___ X                  48 Hour: ___ 5 Day: ___ Normal: ___</p>							
<p><b>Relinquished by:</b>                  [Signature]                  Date/Time: 6-12-25/1148</p>		<p><b>Company:</b>                  H.A.A.</p>		<p><b>Received by:</b>                  [Signature]                  Date/Time: 6/12/25 1148</p>		<p><b>Company:</b>                  ABCO</p>		<p><b>Sample Integrity: (Check)</b>                  Intact: ___ On Ice: ___                  Store samples for 6 months.                  Data Requirements: (Check)                  No Level IV: ___ All Level IV: ___ X</p>		<p><b>Sample Integrity: (Check)</b>                  Intact: ___ On Ice: ___                  Store samples for 6 months.                  Data Requirements: (Check)                  No Level IV: ___ All Level IV: ___ X</p>							





**AQUATIC BIOASSAY**  
& CONSULTING LABORATORIES, INC.

Report ID: EUR0625.184

**96-Hour *Eohaustorius estuarius* Survival Bioassay**  
**Standard Reference Toxicant**

Start Date: June 20, 2025

Standard Toxicant: Ammonium Chloride

Endpoint: Survival

(Unionized Ammonia)

NOEC = 0.4430 mg/L

EC25 = 0.9476 mg/L

EC50 = 1.4660 mg/L

Yours very truly,

A handwritten signature in blue ink, appearing to read 'Joe Freas', is written over the text 'Yours very truly,'.

Joe Freas  
President

**CETIS Summary Report**

Report Date: 02 Jul-25 14:12 (p 1 of 1)  
 Test Code/ID: EOH062025 / 09-3275-0550

**Reference Toxicant 96-h Acute Survival Test**

**Aquatic Bioassay & Consulting Labs, Inc.**

<b>Batch ID:</b> 10-2147-1506	<b>Test Type:</b> Survival	<b>Analyst:</b> Brianna Jones
<b>Start Date:</b> 20 Jun-25 13:00	<b>Protocol:</b> EPA/600/R-94/025 (1994)	<b>Diluent:</b> Laboratory Seawater
<b>Ending Date:</b> 30 Jun-25 13:15	<b>Species:</b> Eohaustorius estuarius	<b>Brine:</b> Not Applicable
<b>Test Length:</b> 10d 0h	<b>Taxon:</b> Malacostraca	<b>Source:</b> Aquatic Biosystems, CO <b>Age:</b>
<b>Sample ID:</b> 04-4215-1727	<b>Code:</b> EOH062025	<b>Project:</b> REF TOX
<b>Sample Date:</b> 20 Jun-25	<b>Material:</b> Ammonia (Unionized)	<b>Source:</b> Reference Toxicant
<b>Receipt Date:</b> 20 Jun-25	<b>CAS (PC):</b>	<b>Station:</b> REF TOX
<b>Sample Age:</b> 13h (4 °C)	<b>Client:</b> Internal Lab	

**Multiple Comparison Summary**

Analysis ID	Endpoint	Comparison Method	NOEL	LOEL	TOEL	PMSD
14-0963-7634	Survival Rate	Steel Many-One Rank Sum Test	0.443	0.792	0.5923	8.11%

**Point Estimate Summary**

Analysis ID	Endpoint	Point Estimate Method	Level	mg/L	95% LCL	95% UCL
00-2440-4784	Survival Rate	Linear Interpolation (ICPIN)	EC15	0.7222	0.6105	0.9113
			EC20	0.8439	0.7609	0.9932
			EC25	0.9476	0.8439	1.114
			EC40	1.259	1.062	1.545
			EC50	1.466	1.207	1.89

**Survival Rate Summary**

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.217		4	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.443		4	0.9500	0.8581	1.0000	0.9000	1.0000	0.0289	0.0577	6.08%	5.00%
0.792		4	0.8250	0.7454	0.9046	0.8000	0.9000	0.0250	0.0500	6.06%	17.50%
1.518		4	0.4750	0.2748	0.6752	0.3000	0.6000	0.0629	0.1258	26.49%	52.50%
3.152		4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	---	100.00%

**Survival Rate Detail**

MD5: 810DD14F41B12F4F20B60DF41FE2DA46

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
0.217		1.0000	1.0000	1.0000	1.0000
0.443		1.0000	0.9000	1.0000	0.9000
0.792		0.8000	0.8000	0.9000	0.8000
1.518		0.6000	0.5000	0.5000	0.3000
3.152		0.0000	0.0000	0.0000	0.0000

**Survival Rate Binomials**

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	10/10	10/10	10/10	10/10
0.217		10/10	10/10	10/10	10/10
0.443		10/10	9/10	10/10	9/10
0.792		8/10	8/10	9/10	8/10
1.518		6/10	5/10	5/10	3/10
3.152		0/10	0/10	0/10	0/10

**CETIS Analytical Report**

Report Date: 02 Jul-25 14:12 (p 1 of 2)  
 Test Code/ID: EOH062025 / 09-3275-0550

**Reference Toxicant 96-h Acute Survival Test**

**Aquatic Bioassay & Consulting Labs, Inc.**

<b>Analysis ID:</b> 14-0963-7634	<b>Endpoint:</b> Survival Rate	<b>CETIS Version:</b> CETIS v2.1.5
<b>Analyzed:</b> 02 Jul-25 14:02	<b>Analysis:</b> Nonparametric-Control vs Treatments	<b>Status Level:</b> 1
<b>Edit Date:</b> 02 Jul-25 0:00	<b>MD5 Hash:</b> 810DD14F41B12F4F20B60DF41FE2DA46	<b>Editor ID:</b> 001-083-753-2
<b>Batch ID:</b> 10-2147-1506	<b>Test Type:</b> Survival	<b>Analyst:</b> Brianna Jones
<b>Start Date:</b> 20 Jun-25 13:00	<b>Protocol:</b> EPA/600/R-94/025 (1994)	<b>Diluent:</b> Laboratory Seawater
<b>Ending Date:</b> 30 Jun-25 13:15	<b>Species:</b> Eohaustorius estuarius	<b>Brine:</b> Not Applicable
<b>Test Length:</b> 10d 0h	<b>Taxon:</b> Malacostraca	<b>Source:</b> Aquatic Biosystems, CO <b>Age:</b>
<b>Sample ID:</b> 04-4215-1727	<b>Code:</b> EOH062025	<b>Project:</b> REF TOX
<b>Sample Date:</b> 20 Jun-25	<b>Material:</b> Ammonia (Unionized)	<b>Source:</b> Reference Toxicant
<b>Receipt Date:</b> 20 Jun-25	<b>CAS (PC):</b>	<b>Station:</b> REF TOX
<b>Sample Age:</b> 13h (4 °C)	<b>Client:</b> Internal Lab	

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Angular (Corrected)	C > T	0.443	0.792	0.5923	---	0.08112	8.11%

**Steel Many-One Rank Sum Test**

Control	vs	Conc-mg/L	df	Test Stat	Critical	Ties	P-Type	P-Value	Decision(α:5%)
Negative Control		0.217	6	18	10	1	CDF	0.8000	Non-Significant Effect
		0.443	6	14	10	1	CDF	0.3081	Non-Significant Effect
		0.792*	6	10	10	0	CDF	0.0350	Significant Effect
		1.518*	6	10	10	0	CDF	0.0350	Significant Effect

**ANOVA Table**

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.21586	0.303966	4	49.9	<1.0E-05	Significant Effect
Error	0.0913728	0.0060915	15			
Total	1.30724		19			

**ANOVA Assumptions Tests**

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test				Indeterminate
	Levene Equality of Variance Test	5.254	4.893	0.0075	Unequal Variances
	Mod Levene Equality of Variance Test	2.134	4.893	0.1268	Equal Variances
Distribution	Anderson-Darling A2 Test	0.9025	3.878	0.0213	Normal Distribution
	D'Agostino Kurtosis Test	1.434	2.576	0.1515	Normal Distribution
	D'Agostino Skewness Test	0.9402	2.576	0.3471	Normal Distribution
	D'Agostino-Pearson K2 Omnibus Test	2.941	9.21	0.2298	Normal Distribution
	Kolmogorov-Smirnov D Test	0.2	0.2235	0.0351	Normal Distribution
	Shapiro-Wilk W Normality Test	0.9217	0.866	0.1069	Normal Distribution



# CETIS Analytical Report

Report Date: 02 Jul-25 14:12 (p 2 of 2)  
Test Code/ID: EOH062025 / 09-3275-0550

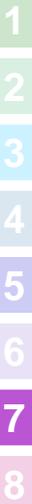
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## Reference Toxicant 96-h Acute Survival Test

Aquatic Bioassay & Consulting Labs, Inc.

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<b>Analysis ID:</b> 14-0963-7634	<b>Endpoint:</b> Survival Rate	<b>CETIS Version:</b> CETIS v2.1.5
<b>Analyzed:</b> 02 Jul-25 14:02	<b>Analysis:</b> Nonparametric-Control vs Treatments	<b>Status Level:</b> 1
<b>Edit Date:</b> 02 Jul-25 0:00	<b>MD5 Hash:</b> 810DD14F41B12F4F20B60DF41FE2DA46	<b>Editor ID:</b> 001-083-753-2



**CETIS Analytical Report**

Report Date: 02 Jul-25 14:12 (p 1 of 2)  
 Test Code/ID: EOH062025 / 09-3275-0550

**Reference Toxicant 96-h Acute Survival Test**

**Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID: 00-2440-4784      Endpoint: Survival Rate      CETIS Version: CETIS v2.1.5  
 Analyzed: 02 Jul-25 14:02      Analysis: Linear Interpolation (ICPIN)      Status Level: 1  
 Edit Date: 02 Jul-25 0:00      MD5 Hash: 810DD14F41B12F4F20B60DF41FE2DA46      Editor ID: 001-083-753-2

Batch ID: 10-2147-1506      Test Type: Survival      Analyst: Brianna Jones  
 Start Date: 20 Jun-25 13:00      Protocol: EPA/600/R-94/025 (1994)      Diluent: Laboratory Seawater  
 Ending Date: 30 Jun-25 13:15      Species: Eohaustorius estuarius      Brine: Not Applicable  
 Test Length: 10d 0h      Taxon: Malacostraca      Source: Aquatic Biosystems, CO      Age:

Sample ID: 04-4215-1727      Code: EOH062025      Project: REF TOX  
 Sample Date: 20 Jun-25      Material: Ammonia (Unionized)      Source: Reference Toxicant  
 Receipt Date: 20 Jun-25      CAS (PC):      Station: REF TOX  
 Sample Age: 13h (4 °C)      Client: Internal Lab

**Linear Interpolation Options**

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

**Point Estimates**

Level	mg/L	95% LCL	95% UCL
EC15	0.7222	0.6105	0.9113
EC20	0.8439	0.7609	0.9932
EC25	0.9476	0.8439	1.114
EC40	1.259	1.062	1.545
EC50	1.466	1.207	1.89

**Survival Rate Detail**

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
0.217		1.0000	1.0000	1.0000	1.0000
0.443		1.0000	0.9000	1.0000	0.9000
0.792		0.8000	0.8000	0.9000	0.8000
1.518		0.6000	0.5000	0.5000	0.3000
3.152		0.0000	0.0000	0.0000	0.0000

**Survival Rate Binomials**

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	10/10	10/10	10/10	10/10
0.217		10/10	10/10	10/10	10/10
0.443		10/10	9/10	10/10	9/10
0.792		8/10	8/10	9/10	8/10
1.518		6/10	5/10	5/10	3/10
3.152		0/10	0/10	0/10	0/10



# CETIS Measurement Report

Report Date: 02 Jul-25 14:12 (p 1 of 3)  
 Test Code/ID: EOH062025 / 09-3275-0550

## Reference Toxicant 96-h Acute Survival Test

Aquatic Bioassay & Consulting Labs, Inc.

<b>Batch ID:</b> 10-2147-1506	<b>Test Type:</b> Survival	<b>Analyst:</b> Brianna Jones
<b>Start Date:</b> 20 Jun-25 13:00	<b>Protocol:</b> EPA/600/R-94/025 (1994)	<b>Diluent:</b> Laboratory Seawater
<b>Ending Date:</b> 30 Jun-25 13:15	<b>Species:</b> Eohaustorius estuarius	<b>Brine:</b> Not Applicable
<b>Test Length:</b> 10d 0h	<b>Taxon:</b> Malacostraca	<b>Source:</b> Aquatic Biosystems, CO <b>Age:</b>

<b>Sample ID:</b> 04-4215-1727	<b>Code:</b> EOH062025	<b>Project:</b> REF TOX
<b>Sample Date:</b> 20 Jun-25	<b>Material:</b> Ammonia (Unionized)	<b>Source:</b> Reference Toxicant
<b>Receipt Date:</b> 20 Jun-25	<b>CAS (PC):</b>	<b>Station:</b> REF TOX
<b>Sample Age:</b> 13h (4 °C)	<b>Client:</b> Internal Lab	

## Dissolved Oxygen-mg/L

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	9.7	7.159	12.24	9.5	9.9	0.1414	0.2828	2.92%	0
0.217		2	9.2	5.388	13.01	8.9	9.5	0.2121	0.4243	4.61%	0
0.443		2	9.95	9.315	10.59	9.9	10	0.03536	0.07073	0.71%	0
0.792		2	9.2	5.388	13.01	8.9	9.5	0.2121	0.4243	4.61%	0
1.518		2	10	8.729	11.27	9.9	10.1	0.07072	0.1414	1.41%	0
3.152		2	9.7	7.159	12.24	9.5	9.9	0.1414	0.2828	2.92%	0
Overall		12	9.625	9.369	9.881	8.9	10.1	0.1162	0.4025	4.18%	0 (0%)

## pH-Units

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.217		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.443		2	7.45	1.732	13.17	7	7.9	0.3182	0.6364	8.54%	0
0.792		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
1.518		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
3.152		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
Overall		12	7.825	7.66	7.99	7	7.9	0.075	0.2598	3.32%	0 (0%)

## Salinity-ppt

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	20	20	20	20	20	0	0	0.00%	0
0.217		2	20	20	20	20	20	0	0	0.00%	0
0.443		2	20	20	20	20	20	0	0	0.00%	0
0.792		2	20	20	20	20	20	0	0	0.00%	0
1.518		2	20	20	20	20	20	0	0	0.00%	0
3.152		2	20	20	20	20	20	0	0	0.00%	0
Overall		12	20	20	20	20	20	0	0	0.00%	0 (0%)

## Temperature-°C

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.217		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.443		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.792		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
1.518		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
3.152		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
Overall		12	14.85	14.82	14.88	14.8	14.9	0.01508	0.05222	0.35%	0 (0%)

**CETIS Measurement Report**

Report Date: 02 Jul-25 14:12 (p 2 of 3)  
 Test Code/ID: EOH062025 / 09-3275-0550

**Reference Toxicant 96-h Acute Survival Test**

Aquatic Bioassay & Consulting Labs, Inc.

**Dissolved Oxygen-mg/L**

Conc-mg/L	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		9.9					
0.217				8.9					
0.443				9.9					
0.792				8.9					
1.518				9.9					
3.152				9.9					
0	N	2		9.5					
0.217				9.5					
0.443				10					
0.792				9.5					
1.518				10.1					
3.152				9.5					

**pH-Units**

Conc-mg/L	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		7.9					
0.217				7.9					
0.443				7.9					
0.792				7.9					
1.518				7.9					
3.152				7.9					
0	N	2		7.9					
0.217				7.9					
0.443				7					
0.792				7.9					
1.518				7.9					
3.152				7.9					

**Salinity-ppt**

Conc-mg/L	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		20					
0.217				20					
0.443				20					
0.792				20					
1.518				20					
3.152				20					
0	N	2		20					
0.217				20					
0.443				20					
0.792				20					
1.518				20					
3.152				20					



# CETIS Measurement Report

Report Date: 02 Jul-25 14:12 (p 3 of 3)  
Test Code/ID: EOH062025 / 09-3275-0550

## Reference Toxicant 96-h Acute Survival Test

Aquatic Bioassay & Consulting Labs, Inc.

### Temperature-°C

Conc-mg/L	Code	Read	Time	Measure	QA	Diff-%	Inst ID	Analyst	Notes
0	N	1		14.8					
0.217				14.8					
0.443				14.8					
0.792				14.8					
1.518				14.8					
3.152				14.8					
0	N	2		14.9					
0.217				14.9					
0.443				14.9					
0.792				14.9					
1.518				14.9					
3.152				14.9					

**CETIS QC Plot**

Report Date: 02 Jul-25 14:03 ( 1 of 1)

**Reference Toxicant 96-h Acute Survival Test**

**Aquatic Bioassay & Consulting Labs, Inc.**

Test Type: Survival

Organism: Eohaustorius estuarius

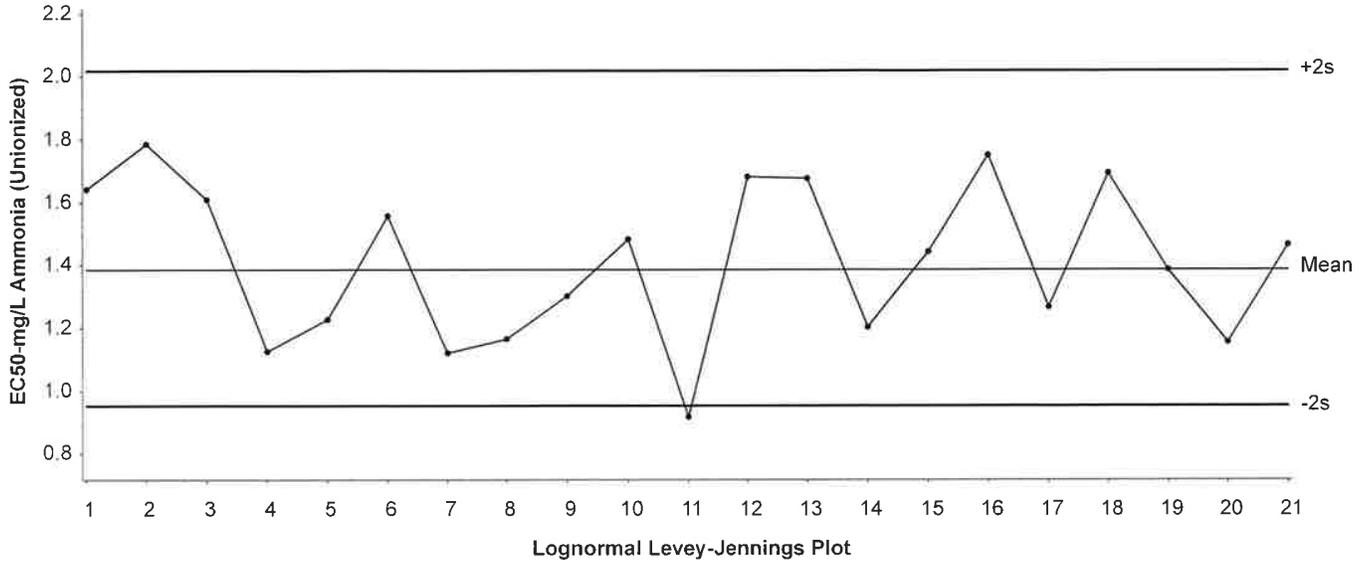
Material: Ammonia (Unionized)

Protocol: EPA/600/R-94/025 (1994)

Endpoint: Survival Rate

Source: Reference Toxicant-REF

**Reference Toxicant 96-h Acute Survival Test  
Survival Rate Endpoint**



Mean: 1.386  
Sigma: NA

Count: 20  
CV: 19.00%

-2s Action Limit: 0.952  
+2s Action Limit: 2.02

**Quality Control Data**

Point	Year	Month	Day	Time	QC Data	Delta	Sigma	Warning	Action	Test ID	Analysis ID
1	2023	Aug	18	12:00	1.642	0.2557	0.9004			16-7719-9022	02-8816-4118
2			24	12:15	1.784	0.3978	1.342			09-2704-4300	13-3997-5569
3		Oct	3	13:00	1.61	0.224	0.7969			00-6557-1278	10-1047-2771
4		Nov	3	0:00	1.125	-0.2608	-1.109			03-7737-0953	12-7580-5754
5	2024	Jan	16	13:00	1.227	-0.1593	-0.6492			07-9028-6566	03-4516-2512
6		Feb	20	13:15	1.556	0.1699	0.615			13-2388-5202	02-3847-6356
7		Mar	26	0:00	1.12	-0.266	-1.133			21-0717-1969	19-7484-9475
8		Apr	23	13:00	1.166	-0.2198	-0.9182			17-1773-5797	00-1308-4774
9		May	10	11:30	1.301	-0.08478	-0.3357			16-2470-2156	07-2498-9936
10		Jun	18	13:00	1.482	0.09559	0.3547			06-7874-1926	11-2314-4057
11		Jul	2	0:00	0.9166	-0.4695	-2.2		(-)	19-9188-4923	14-3814-2241
12			19	13:00	1.68	0.2944	1.024			07-1090-2329	04-2710-1098
13		Sep	6	13:00	1.676	0.2899	1.01			12-4382-2729	09-8003-6232
14			13	13:00	1.203	-0.1831	-0.7536			06-1121-1925	20-5048-8957
15		Oct	8	13:00	1.442	0.05603	0.2108			02-1522-8828	06-7363-3062
16			18	12:00	1.75	0.3639	1.24			09-9644-1200	04-7552-1769
17		Nov	29	0:00	1.266	-0.1203	-0.483			17-2180-8880	19-3422-3015
18	2025	Jan	23	13:10	1.693	0.307	1.064			15-4138-1290	00-5094-1592
19		Mar	4	14:00	1.385	-0.00097	-0.00371			18-8571-4436	05-2356-7377
20			28	13:00	1.155	-0.2311	-0.9702			09-8060-5182	11-5752-0395
21		Jun	20	13:00	1.466	0.08003	0.2986			09-3275-0550	00-2440-4784



**AQUATIC BIOASSAY**  
& CONSULTING LABORATORIES, INC.



### CHRONIC MYTILUS DEVELOPMENT BIOASSAY

DATE: 6/17/2025

Report ID: EUR0625.148

STANDARD TOXICANT: Unionized Ammonia

NOEC = 0.05000 mg/l

EC25 = 0.06496 mg/l

EC50 = 0.09751 mg/l

Yours very truly,

A handwritten signature in blue ink, appearing to read 'Joe Freas', written over the typed name and title.

Joe Freas  
President

# CETIS Summary Report

Report Date: 02 Jul-25 13:41 (p 1 of 1)  
 Test Code/ID: MYT061725 / 09-0320-8283

Mussel Shell Development Test				Aquatic Bioassay & Consulting Labs, Inc.			
Batch ID:	09-6822-9542	Test Type:	Development-Survival	Analyst:	Joe Freas		
Start Date:	17 Jun-25 13:10	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Seawater		
Ending Date:	19 Jun-25 13:15	Species:	Mytilus galloprovincialis	Brine:	Not Applicable		
Test Length:	48h	Taxon:	Bivalvia	Source:	Carlsbad Aquafarms CA	Age:	
Sample ID:	20-8335-5653	Code:	MYT061725	Project:	REF TOX		
Sample Date:	17 Jun-25	Material:	Ammonia (Unionized)	Source:	Reference Toxicant		
Receipt Date:	17 Jun-25	CAS (PC):		Station:	REF TOX		
Sample Age:	13h (4 °C)	Client:	Internal Lab				

Multiple Comparison Summary						
Analysis ID	Endpoint	Comparison Method	NOEL	LOEL	TOEL	PMSD
18-2464-1083	Combined Proportion Norma	Dunnett Multiple Comparison Test	0.05	0.075	0.06124	1.91%

Point Estimate Summary						
Analysis ID	Endpoint	Point Estimate Method	Level	mg/L	95% LCL	95% UCL
10-1569-4749	Combined Proportion Norma	Linear Interpolation (ICPIN)	EC15	0.05898	0.05826	0.05985
			EC20	0.06197	0.06101	0.06313
			EC25	0.06496	0.06379	0.06641
			EC40	0.07394	0.07207	0.0779
			EC50	0.09751	0.09482	0.09864

Combined Proportion Normal Summary											
Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	5	0.9674	0.9518	0.9830	0.9548	0.9864	0.0056	0.0126	1.30%	0.00%
0.028		5	0.9774	0.9601	0.9947	0.9548	0.9910	0.0062	0.0140	1.43%	-1.03%
0.05		5	0.9783	0.9649	0.9917	0.9638	0.9910	0.0048	0.0108	1.10%	-1.12%
0.075		5	0.5674	0.5274	0.6075	0.5385	0.6109	0.0144	0.0323	5.68%	41.35%
0.097		5	0.4959	0.4751	0.5168	0.4751	0.5204	0.0075	0.0168	3.39%	48.74%
0.119		5	0.1149	0.1020	0.1279	0.1041	0.1312	0.0047	0.0104	9.06%	88.12%

Combined Proportion Normal Detail							MD5: 987731D88ADA6DF833CDEDF42C90F354
Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	N	0.9548	0.9638	0.9864	0.9729	0.9593	
0.028		0.9774	0.9864	0.9910	0.9548	0.9774	
0.05		0.9774	0.9638	0.9864	0.9729	0.9910	
0.075		0.5385	0.5475	0.6109	0.5475	0.5928	
0.097		0.4887	0.5023	0.4932	0.5204	0.4751	
0.119		0.1041	0.1312	0.1086	0.1131	0.1176	

Combined Proportion Normal Binomials						
Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	211/221	213/221	218/221	215/221	212/221
0.028		216/221	218/221	219/221	211/221	216/221
0.05		216/221	213/221	218/221	215/221	219/221
0.075		119/221	121/221	135/221	121/221	131/221
0.097		108/221	111/221	109/221	115/221	105/221
0.119		23/221	29/221	24/221	25/221	26/221

**CETIS Analytical Report**

Report Date: 02 Jul-25 13:41 (p 1 of 2)  
 Test Code/ID: MYT061725 / 09-0320-8283

Mussel Shell Development Test			Aquatic Bioassay & Consulting Labs, Inc.		
Analysis ID: 18-2464-1083	Endpoint: Combined Proportion Normal	CETIS Version: CETIS v2.1.5			
Analyzed: 02 Jul-25 13:40	Analysis: Parametric-Control vs Treatments	Status Level: 1			
Edit Date: 02 Jul-25 0:00	MD5 Hash: DE40CE700DBF09A0F463EB48B70BB029	Editor ID: 001-083-753-2			
Batch ID: 09-6822-9542	Test Type: Development-Survival	Analyst: Joe Freas			
Start Date: 17 Jun-25 13:10	Protocol: EPA/600/R-95/136 (1995)	Diluent: Laboratory Seawater			
Ending Date: 19 Jun-25 13:15	Species: Mytilus galloprovincialis	Brine: Not Applicable			
Test Length: 48h	Taxon: Bivalvia	Source: Carlsbad Aquafarms CA Age:			
Sample ID: 20-8335-5653	Code: MYT061725	Project: REF TOX			
Sample Date: 17 Jun-25	Material: Ammonia (Unionized)	Source: Reference Toxicant			
Receipt Date: 17 Jun-25	CAS (PC):	Station: REF TOX			
Sample Age: 13h (4 °C)	Client: Internal Lab				

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Angular (Corrected)	C > T	0.05	0.075	0.06124	---	0.01846	1.91%

Dunnnett Multiple Comparison Test									
Control	vs	Conc-mg/L	df	Test Stat	Critical	MSD	P-Type	P-Value	Decision(α:5%)
Negative Control		0.028	8	-1.55	2.362	0.04964	CDF	0.9968	Non-Significant Effect
		0.05	8	-1.63	2.362	0.04964	CDF	0.9975	Non-Significant Effect
		0.075*	8	25.66	2.362	0.04964	CDF	<1.0E-05	Significant Effect
		0.097*	8	29.08	2.362	0.04964	CDF	<1.0E-05	Significant Effect
		0.119*	8	49.81	2.362	0.04964	CDF	<1.0E-05	Significant Effect

ANOVA Table						
Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	5.03082	1.00616	5	911.1	<1.0E-05	Significant Effect
Error	0.0265032	0.0011043	24			
Total	5.05733		29			

ANOVA Assumptions Tests						
Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)	
Variance	Bartlett Equality of Variance Test	5.94	15.09	0.3121	Equal Variances	
	Levene Equality of Variance Test	1.457	3.895	0.2406	Equal Variances	
	Mod Levene Equality of Variance Test	0.9325	4.248	0.4833	Equal Variances	
Distribution	Anderson-Darling A2 Test	0.4168	3.878	0.3356	Normal Distribution	
	D'Agostino Kurtosis Test	0.08644	2.576	0.9311	Normal Distribution	
	D'Agostino Skewness Test	0.3061	2.576	0.7595	Normal Distribution	
	D'Agostino-Pearson K2 Omnibus Test	0.1012	9.21	0.9507	Normal Distribution	
	Kolmogorov-Smirnov D Test	0.1342	0.1853	0.1778	Normal Distribution	
	Shapiro-Wilk W Normality Test	0.9753	0.9031	0.6901	Normal Distribution	

# CETIS Analytical Report

Report Date: 02 Jul-25 13:41 (p 2 of 2)  
Test Code/ID: MYT061725 / 09-0320-8283

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## Mussel Shell Development Test

Aquatic Bioassay & Consulting Labs, Inc.

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<b>Analysis ID:</b> 18-2464-1083	<b>Endpoint:</b> Combined Proportion Normal	<b>CETIS Version:</b> CETIS v2.1.5
<b>Analyzed:</b> 02 Jul-25 13:40	<b>Analysis:</b> Parametric-Control vs Treatments	<b>Status Level:</b> 1
<b>Edit Date:</b> 02 Jul-25 0:00	<b>MD5 Hash:</b> DE40CE700DBF09A0F463EB48B70BB029	<b>Editor ID:</b> 001-083-753-2

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**CETIS Analytical Report**

Report Date: 02 Jul-25 13:41 (p 1 of 2)  
 Test Code/ID: MYT061725 / 09-0320-8283

Mussel Shell Development Test			Aquatic Bioassay & Consulting Labs, Inc.		
<b>Analysis ID:</b> 10-1569-4749	<b>Endpoint:</b> Combined Proportion Normal	<b>CETIS Version:</b> CETIS v2.1.5			
<b>Analyzed:</b> 02 Jul-25 13:40	<b>Analysis:</b> Linear Interpolation (ICPIN)	<b>Status Level:</b> 1			
<b>Edit Date:</b> 02 Jul-25 0:00	<b>MD5 Hash:</b> DE40CE700DBF09A0F463EB48B70BB029	<b>Editor ID:</b> 001-083-753-2			
<b>Batch ID:</b> 09-6822-9542	<b>Test Type:</b> Development-Survival	<b>Analyst:</b> Joe Freas			
<b>Start Date:</b> 17 Jun-25 13:10	<b>Protocol:</b> EPA/600/R-95/136 (1995)	<b>Diluent:</b> Laboratory Seawater			
<b>Ending Date:</b> 19 Jun-25 13:15	<b>Species:</b> Mytilus galloprovincialis	<b>Brine:</b> Not Applicable			
<b>Test Length:</b> 48h	<b>Taxon:</b> Bivalvia	<b>Source:</b> Carlsbad Aquafarms CA <b>Age:</b>			
<b>Sample ID:</b> 20-8335-5653	<b>Code:</b> MYT061725	<b>Project:</b> REF TOX			
<b>Sample Date:</b> 17 Jun-25	<b>Material:</b> Ammonia (Unionized)	<b>Source:</b> Reference Toxicant			
<b>Receipt Date:</b> 17 Jun-25	<b>CAS (PC):</b>	<b>Station:</b> REF TOX			
<b>Sample Age:</b> 13h (4 °C)	<b>Client:</b> Internal Lab				

Linear Interpolation Options					
X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	0	280	Yes	Two-Point Interpolation

Point Estimates			
Level	mg/L	95% LCL	95% UCL
EC15	0.05898	0.05826	0.05985
EC20	0.06197	0.06101	0.06313
EC25	0.06496	0.06379	0.06641
EC40	0.07394	0.07207	0.0779
EC50	0.09751	0.09482	0.09864

Combined Proportion Normal Detail						
Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9548	0.9638	0.9864	0.9729	0.9593
0.028		0.9774	0.9864	0.9910	0.9548	0.9774
0.05		0.9774	0.9638	0.9864	0.9729	0.9910
0.075		0.5385	0.5475	0.6109	0.5475	0.5928
0.097		0.4887	0.5023	0.4932	0.5204	0.4751
0.119		0.1041	0.1312	0.1086	0.1131	0.1176

Combined Proportion Normal Binomials						
Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	211/221	213/221	218/221	215/221	212/221
0.028		216/221	218/221	219/221	211/221	216/221
0.05		216/221	213/221	218/221	215/221	219/221
0.075		119/221	121/221	135/221	121/221	131/221
0.097		108/221	111/221	109/221	115/221	105/221
0.119		23/221	29/221	24/221	25/221	26/221

# CETIS Analytical Report

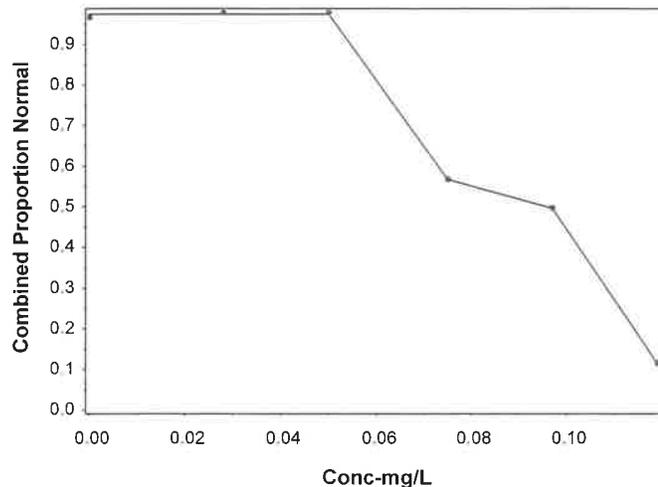
Report Date: 02 Jul-25 13:41 (p 2 of 2)  
Test Code/ID: MYT061725 / 09-0320-8283

## Mussel Shell Development Test

Aquatic Bioassay & Consulting Labs, Inc.

<b>Analysis ID:</b> 10-1569-4749	<b>Endpoint:</b> Combined Proportion Normal	<b>CETIS Version:</b> CETIS v2.1.5
<b>Analyzed:</b> 02 Jul-25 13:40	<b>Analysis:</b> Linear Interpolation (ICPIN)	<b>Status Level:</b> 1
<b>Edit Date:</b> 02 Jul-25 0:00	<b>MD5 Hash:</b> DE40CE700DBF09A0F463EB48B70BB029	<b>Editor ID:</b> 001-083-753-2

### Graphics



# CETIS Measurement Report

Report Date: 02 Jul-25 13:41 (p 1 of 1)  
 Test Code/ID: MYT061725 / 09-0320-8283

Mussel Shell Development Test				Aquatic Bioassay & Consulting Labs, Inc.			
Batch ID:	09-6822-9542	Test Type:	Development-Survival	Analyst:	Joe Freas		
Start Date:	17 Jun-25 13:10	Protocol:	EPA/600/R-95/136 (1995)	Diluent:	Laboratory Seawater		
Ending Date:	19 Jun-25 13:15	Species:	Mytilus galloprovincialis	Brine:	Not Applicable		
Test Length:	48h	Taxon:	Bivalvia	Source:	Carlsbad Aquafarms CA	Age:	
Sample ID:	20-8335-5653	Code:	MYT061725	Project:	REF TOX		
Sample Date:	17 Jun-25	Material:	Ammonia (Unionized)	Source:	Reference Toxicant		
Receipt Date:	17 Jun-25	CAS (PC):		Station:	REF TOX		
Sample Age:	13h (4 °C)	Client:	Internal Lab				

Dissolved Oxygen-mg/L											
Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	6.75	4.844	8.656	6.6	6.9	0.1061	0.2121	3.14%	0
0.028		2	7.7	5.159	10.24	7.5	7.9	0.1414	0.2828	3.67%	0
0.05		2	6.7	5.429	7.971	6.6	6.8	0.07071	0.1414	2.11%	0
0.075		2	7.3	6.029	8.571	7.2	7.4	0.07071	0.1414	1.94%	0
0.097		2	6.55	5.915	7.185	6.5	6.6	0.03535	0.0707	1.08%	0
0.119		2	6.55	2.103	11	6.2	6.9	0.2475	0.495	7.56%	0
Overall		12	6.925	6.615	7.235	6.2	7.9	0.141	0.4883	7.05%	0 (0%)

Total Ammonia (N)-mg/L											
Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	0	0	0	0	0	0	0	---	0
Overall		2	0	0	0	0	0	0	0	#Num!	0 (0%)

pH-Units											
Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.028		2	7.95	7.315	8.585	7.9	8	0.03535	0.0707	0.89%	0
0.05		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.075		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.097		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.119		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
Overall		12	7.908	7.89	7.927	7.9	8	0.008333	0.02887	0.37%	0 (0%)

Salinity-ppt											
Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	34	34	34	34	34	0	0	0.00%	0
0.028		2	34	34	34	34	34	0	0	0.00%	0
0.05		2	34	34	34	34	34	0	0	0.00%	0
0.075		2	34	34	34	34	34	0	0	0.00%	0
0.097		2	34	34	34	34	34	0	0	0.00%	0
0.119		2	34	34	34	34	34	0	0	0.00%	0
Overall		12	34	34	34	34	34	0	0	0.00%	0 (0%)

Temperature-°C											
Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.028		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.05		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.075		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.097		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.119		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
Overall		12	14.85	14.82	14.88	14.8	14.9	0.01508	0.05222	0.35%	0 (0%)

Mussel Shell Development Test

Aquatic Bioassay & Consulting Labs, Inc.

Test Type: Development-Survival

Organism: Mytilus galloprovincialis

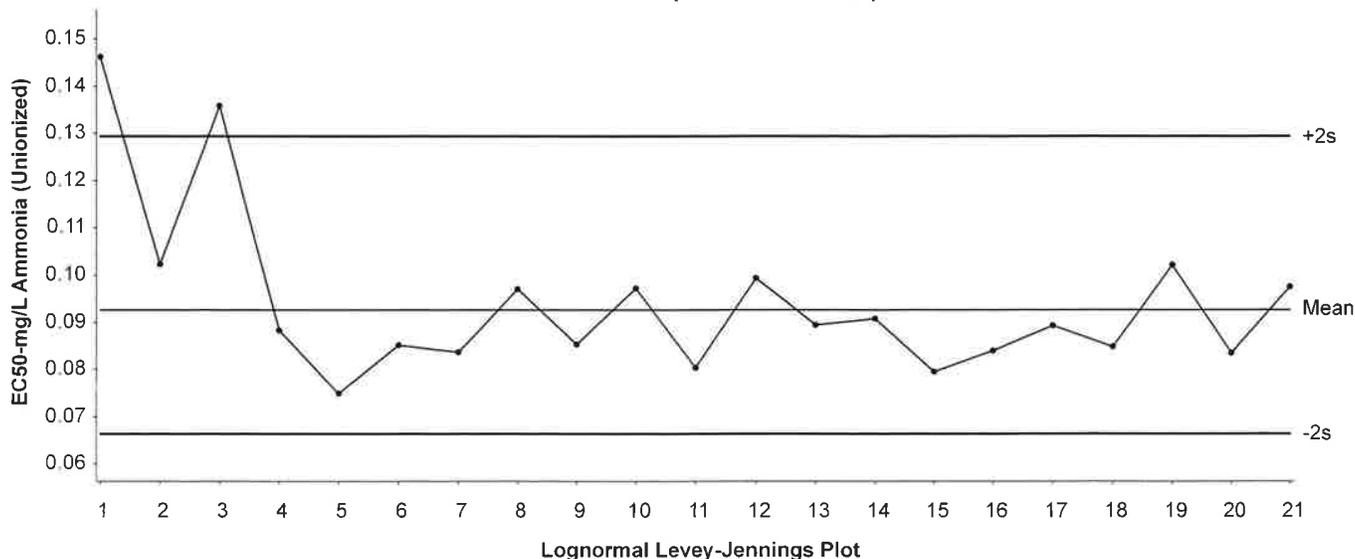
Material: Ammonia (Unionized)

Protocol: EPA/600/R-95/136 (1995)

Endpoint: Combined Proportion Normal

Source: Reference Toxicant-REF

Mussel Shell Development Test  
Combined Proportion Normal Endpoint



Mean: 0.09255

Count: 20

-2s Action Limit: 0.0662

Sigma: NA

CV: 16.80%

+2s Action Limit: 0.129

Quality Control Data

Point	Year	Month	Day	Time	QC Data	Delta	Sigma	Warning	Action	Test ID	Analysis ID
1	2023	Jul	19	0:00	0.1463	0.05376	2.738		(+)	00-6506-6524	03-8125-2487
2		Aug	15	13:00	0.1023	0.009716	0.5967			07-6681-2829	05-0717-8449
3			16	13:00	0.1359	0.04334	2.296		(+)	00-8831-9073	14-7703-4151
4			22	16:00	0.08831	-0.00424	-0.2802			12-3822-4544	05-0427-9619
5		Oct	3	13:10	0.07484	-0.01771	-1.269			15-4650-9965	07-6798-0635
6			24	13:00	0.08506	-0.00749	-0.5045			01-3899-8986	11-4131-4541
7	2024	Jan	23	17:30	0.08365	-0.00890	-0.6044			04-8356-9518	19-6424-7825
8		Feb	20	13:30	0.09695	0.004399	0.2776			15-5918-9942	05-7037-2473
9		Apr	2	12:00	0.08523	-0.00732	-0.4923			13-2034-1612	20-6960-7205
10			23	12:00	0.09721	0.004662	0.2937			03-1593-0307	06-6186-4665
11		May	14	13:00	0.0803	-0.01225	-0.8489			17-3164-6285	20-9920-0732
12		Jun	18	13:01	0.09938	0.006831	0.4257			17-8879-4127	00-4929-5010
13		Jul	22	12:30	0.08941	-0.00315	-0.2066			18-7588-8482	02-5977-8405
14			30	14:00	0.09082	-0.00174	-0.1131			02-0450-4594	14-2269-2474
15		Sep	16	13:00	0.07956	-0.01299	-0.904			14-0170-2358	21-0328-5234
16		Oct	8	13:00	0.084	-0.00855	-0.5794			05-7952-5490	06-6431-6305
17		Nov	5	15:00	0.08919	-0.00336	-0.2208			08-8682-0671	06-8964-9173
18	2025	Feb	4	13:00	0.08479	-0.00776	-0.5235			21-4710-9822	11-4905-6575
19		Mar	4	14:00	0.1022	0.009626	0.5914			12-7424-1616	21-3312-2606
20		Apr	29	13:00	0.08354	-0.00901	-0.612			11-6604-6384	15-3921-7129
21		Jun	17	13:10	0.09751	0.004955	0.3117			09-0320-8283	10-1569-4749



# Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 570-234309-2

**Login Number: 234309**

**List Number: 1**

**Creator: Chapman, Allyson**

**List Source: Eurofins Calscience**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

**APPENDIX E**

**Receiving Water Surveys, Second Quarter 2025**

**Observation Requirements:** General observations are required on a monthly basis when Outfall 002 (Bell Creek), Outfall 009 (Arroyo Simi), and/or Outfall 008 (Dayton Creek) are flowing.

SECOND QUARTER 2025 BELL CREEK OBSERVATIONS AT OUTFALL 002			
BELL CREEK OBSERVATIONS	APRIL	MAY	JUNE
Date and time of inspection	4/1/2025, 08:30	N/A	N/A
Weather conditions	Cool, partly cloudy, breezy	N/A	N/A
Color of water	Pale brown	N/A	N/A
Appearance of oil films or grease, or floatable materials	None	N/A	N/A
Extent of visible turbidity or color patches	Uniform translucent	N/A	N/A
Description of odor, if any	None	N/A	N/A
Presence or activity of California Least Tern or California Brown Pelicar	No	N/A	N/A

**Notes:**

N/A = not applicable. Since Outfall 002 did not flow in May and June, no monthly inspections were required at Outfall 002 for May and June.

SECOND QUARTER 2025 ARROYO SIMI OBSERVATIONS AT ARROYO SIMI DOWNSTREAM			
ARROYO SIMI OBSERVATIONS	APRIL	MAY	JUNE
Date and time of inspection	N/A	N/A	N/A
Weather conditions	N/A	N/A	N/A
Color of water	N/A	N/A	N/A
Appearance of oil films or grease, or floatable materials	N/A	N/A	N/A
Extent of visible turbidity or color patches	N/A	N/A	N/A
Description of odor, if any	N/A	N/A	N/A
Presence or activity of California Least Tern or California Brown Pelicar	N/A	N/A	N/A

**Notes:**

N/A = not applicable. Since Outfall 009 did not flow in April, May, and June, no monthly inspections were required at Arroyo Simi for April, May, and June.

SECOND QUARTER 2025 ARROYO SIMI OBSERVATIONS AT ARROYO SIMI UPSTREAM			
ARROYO SIMI OBSERVATIONS	APRIL	MAY	JUNE
Date and time of inspection	N/A	N/A	N/A
Weather conditions	N/A	N/A	N/A
Color of water	N/A	N/A	N/A
Appearance of oil films or grease, or floatable materials	N/A	N/A	N/A
Extent of visible turbidity or color patches	N/A	N/A	N/A
Description of odor, if any	N/A	N/A	N/A
Presence or activity of California Least Tern or California Brown Pelicar	N/A	N/A	N/A

**Notes:**

N/A = not applicable. Since Outfall 009 did not flow in April, May, and June, no monthly inspections were required at Arroyo Simi for April, May, and June.

**TABLE E**

**RECEIVING WATER SURVEYS**  
 SECOND QUARTER 2025  
 THE BOEING COMPANY  
 SANTA SUSANA FIELD LABORATORY  
 NPDES PERMIT CA0001309

<b>SECOND QUARTER 2025 DAYTON CANYON CREEK OBSERVATIONS AT OUTFALL 008</b>			
<b>DAYTON CANYON CREEK OBSERVATIONS</b>	<b>APRIL</b>	<b>MAY</b>	<b>JUNE</b>
Date and time of inspection	N/A	N/A	N/A
Weather conditions	N/A	N/A	N/A
Color of water	N/A	N/A	N/A
Appearance of oil films or grease, or floatable materials	N/A	N/A	N/A
Extent of visible turbidity or color patches	N/A	N/A	N/A
Description of odor, if any	N/A	N/A	N/A
Presence or activity of California Least Tern or California Brown Pelicar	N/A	N/A	N/A

**Notes:**

*N/A = not applicable. Since Outfall 008 did not flow in April, May, and June, no monthly inspections were required at Outfall 008 for April, May, and June.*