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

Via CIWQS

15 August 2024
In reply refer to SHEA-116828

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

Subject: Second Quarter 2024 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 1 April through 30 June (Second Quarter 2024). 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, approximately 450 acres owned by the United States and administered by the National Aeronautics and Space Administration (NASA), and approximately 472 acres of Boeing's land for which the Department of Energy (DOE) has assumed responsibility for soil remediation.

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

SECOND QUARTER 2024 DMR COVER LETTER CONTENTS

This DMR cover letter includes the following sections and appendices:

- Stormwater Treatment System Activities
- Discharge and Sample Collection Summary
- Summary of Exceedances and/or Non-Compliance
- Contested NPDES Permit Conditions
- Stormwater Pollution Prevention Plan/Best Management Practice Activities
- List of Tables (included as attachment)
  - TABLE 1: SWTS Maintenance Activities, Second Quarter 2024
  - TABLE 2: SWTS Operational Activities, Second Quarter 2024
  - TABLE 3: Sampling Record, Second Quarter 2024
  - TABLE 4: BMP Activities, Second Quarter 2024

STORMWATER TREATMENT SYSTEM ACTIVITIES

The Stormwater Treatment System (SWTS) located near R-1 Pond (SWTS 011) discharges through Outfall 011. The SWTS located at Silvernale Pond (SWTS 018) discharges through Outfall 018. SWTS maintenance activities completed in the Second Quarter 2024 are included in Table 1.

SWTS 011 operated one time and SWTS 018 operated one time during the Second Quarter 2024. Operational activities are summarized in Table 2.

DISCHARGE AND SAMPLE COLLECTION SUMMARY

One qualifying rain event occurred during the Second Quarter 2024 (Appendix A); and it produced stormwater discharges. Stormwater samples were collected at Outfalls 001, 002, 008, 009, 011, and 018 in one or more rain events or SWTS discharge events this quarter. There were no changes in the discharge as described in the NPDES Permit during the reporting period.

In addition to outfall sampling, SWTS influent samples and receiving water samples were also collected. One influent sample was collected at SWTS 011 (INF-001), and one influent sample was collected at SWTS 018 (INF-002). A quarterly on-site receiving water sample was collected at the Bell Creek location (RSW-001, Outfall 002, see Figure 1) and quarterly off-site receiving water samples were collected at the Arroyo Simi locations RSW-002 [downstream] and RSW-003 [upstream]; see Figure 2). The annual sediment sample was also collected at the Arroyo Simi–Frontier Park location on 13 June 2024.

Table 3 summarizes the Second Quarter 2024 sampling record 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 E.

SUMMARY OF EXCEEDANCES AND/OR NON-COMPLIANCE

As summarized in Appendix D, the Second Quarter 2024 exceedances of Daily Maximum Permit limits, Receiving Water limits, or other non-compliance included:

- Aluminum at Outfalls 001, 002, and 009;
- Lead at Outfall 009; and,
- Sulfate at Outfall 002.

ALUMINUM AT OUTFALLS 001, 002, AND 009

Aluminum was detected in stormwater samples collected from the following outfalls above the Daily Maximum Permit Limit of 1.0 milligrams per liter (mg/L):

- Outfall 001 on 15 April 2024 at 1.4 mg/L;
- Outfall 002 on 15 April 2024 at 1.4 mg/L; and
- Outfall 009 on 15 April 2024 at 2.3 mg/L.

The NPDES Permit establishes new effluent limitations for aluminum, based on the reasonable potential analysis performed by the Regional Board. However, Boeing believes that aluminum limits are improper because significant evidence (including data and analyses produced from studies conducted by the Stormwater Expert Panel [Expert Panel], and data on aluminum concentrations in site-wide surface soils relative to background threshold values, as presented in its 2023 Annual Report) show that aluminum is naturally occurring rather than residual from former industrial operations at the Santa Susana Site. The Expert Panel will evaluate these exceedances in their 2024 Annual Report.

LEAD AT OUTFALL 009

Lead was detected above the Daily Maximum Permit Limit of 5.2 micrograms per liter (µg/L) in the stormwater sample from Outfall 009 on:

- 15 April 2024 at 14 µg/L.

Boeing's investigations of lead detections in stormwater are currently focused on the Former Shooting Range Remediation Project that started in June 2023. The remedial work is located within the upper-most reaches of the Outfall 009 watershed and is an ongoing effort to remove lead in accordance with an Imminent and Substantial Endangerment Determination and Consent Order issued by the Department of Toxic Substances Control (DTSC, 2022). Before and throughout the course of the remedial work, Boeing has installed, and continues to install, more robust best management practices (BMPs) at the Former Shooting Range, in accordance with the Construction Stormwater Pollution Prevention Plan (SWPPP) prepared for this project (Stantec, 2022b) and incorporated in the Removal Action Workplan (Stantec, 2022a). The Expert Panel provided construction BMP recommendations prior to and during the remedial work for the Former Shooting Range area and is expected to make additional post-remediation stabilization recommendations for disturbed soil areas of the Former Shooting Range area.

SULFATE AT OUTFALL 002

Sulfate was detected above the Daily Maximum Permit Limit of 300 mg/L from in the stormwater sample from Outfall 002 on:

- 15 April 2024 at 310 mg/L.

Sulfate is known to be naturally elevated in groundwater in the southwestern portion of the site. To understand why sulfate could be elevated in stormwater, the Expert Panel evaluated three independent lines of evidence: (1) the Santa Susana Formation, which is found in just the southwest corner of the Santa Susana Site, contains shale and shaly sandstone, and shale is known to contain sulfur; (2) high sulfate concentrations have been reported by the Groundwater Expert Panel in seeps above and below Outfall 002 and sulfate concentrations in stormwater samples at the site are typically highest during baseflow periods and late in the wet season when the water table is highest; and (3) sulfate concentrations in off-site background stormwater samples were detected at similar levels above the permit limit (Geosyntec and the Expert Panel, 2023). Additionally, SWTS 018 was not operating at the time this sample was collected and was not a source. Therefore, Boeing believes this sulfate exceedance is from naturally occurring sources. The Expert Panel will evaluate these exceedances in their 2024 Annual Report.

CONTESTED NPDES PERMIT CONDITIONS

Boeing has filed a lawsuit in Los Angeles Superior Court (the "Action") against the Regional Board challenging certain conditions in the NPDES Permit (the "Contested Conditions"). The Contested Conditions include, but are not limited to, requirements for stormwater monitoring of PCBs using Method 1668C; monitoring of additional constituents identified in the Standardized Risk Assessment Methodology ("SRAM"); effluent limits at Outfalls 001 and 002, and effluent limits for aluminum at multiple outfalls. Despite the substantial harm Boeing will incur by complying with these Contested Conditions while the Action is pending, Boeing nonetheless is complying with those Contested Conditions, under protest, by submitting this DMR. In so complying, Boeing neither waives any rights to pursue its petitions or appeals, nor admits the propriety of such Contested Conditions. Boeing reserves all rights to pursue the Action, and any subsequent appeals.

STORMWATER POLLUTION PREVENTION PLAN/BEST MANAGEMENT PRACTICE ACTIVITIES

BOEING-RELATED ACTIVITIES

Boeing implemented BMP activities in compliance with the site-wide SWPPP (Haley & Aldrich, 2024) to assist in improving stormwater quality and compliance at the Santa Susana Site. Boeing updated the SWPPP in the First Quarter 2024 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 2024 in coordination with the Expert Panel. Table 4 summarizes the BMP activities completed during the Second Quarter 2024 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

During the Second Quarter 2024, NASA continued to inspect and maintain BMPs in accordance with the Construction General Permit (CGP) and maintained fiber rolls and sandbags as perimeter and linear sediment controls in areas where construction activities are occurring (NASA, 2023).

DOE-RELATED ACTIVITIES

DOE has closed the site-specific Construction SWPPPs for the Hazardous Waste Management Facility (HWMF), the Radioactive Materials Handling Facility (RMHF), and other facilities within Area IV (DOE 2020a, 2020b, and 2020c). Consequently, all demolition-related BMPs as well as BMPs at the Former Sodium Disposal Facility (FSDF) have been removed.

CONCLUSIONS

Boeing believes that most of the detected exceedances are likely attributable to wildlife, background, or non-industrial sources, which is consistent with the research and conclusions of the Expert Panel. The Expert Panel is reviewing the data collected and will make BMP and monitoring recommendations that will be communicated in the Expert Panel's 2024 Annual Report.

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 by implementing distributed, sustainable erosion control/restoration measures.

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 2024 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 2024
Table 2: SWTS Operational Activities, Second Quarter 2024
Table 3: Sampling Record, Second Quarter 2024
Table 4: BMP Activities, Second Quarter 2024

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 2024
Appendix B - Waste Shipment Summary Table, Second Quarter 2024
Appendix C - Discharge Monitoring Data Summary Tables, Second Quarter 2024
Appendix D - NPDES Permit Limit Exceedances and/or Non-Compliance, Second Quarter 2024
Appendix E - Toxicity Laboratory Reports and Validation Reports, Second Quarter 2024
Appendix F - Receiving Water Surveys, Second Quarter 2024

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. DTSC, 2022. *Former Rocketdyne-Atomics International Rifle and Pistol Club Shooting Range and Overshot Area Imminent and Substantial Endangerment Determination and Consent Order, Simi Valley, Ventura Country, CA (Docket No. HAS-FY21/22-131).* 25 March.

3. Geosyntec and the Expert Panel, 2023. *Santa Susana Field Laboratory Site-wide Stormwater Annual Report, 2022/23 Reporting Year, Ventura County, California (NPDES No. CA0001309, CI No.6027).* October.

4. Haley & Aldrich, Inc., 2024. *Stormwater Pollution and Prevention Plan (Version 1 for Compliance with 2023 NPDES Permit).* 29 March.

5. Jacobs, 2023. *Stormwater Pollution Prevention Plan (SWPPP) for Santa Susanna Field Laboratory Area I Burn Pit Removal Action, Ventura County, California.* August.

6. National Aeronautics and Space Administration, 2021 with revision 2023. *Stormwater Pollution and Prevention Plan for the Pacific Region MATOC FY21 Facilities Reduction Program at the NASA Santa Susana Field Laboratory (Phase 5 - Bravo Test Area Demolition), Ventura County, California.* July.

7. Stantec Consulting Services, Inc., 2022a. *Draft Removal Action Workplan (RAW), Former Rocketdyne – Atomics International Rifle and Pistol Club Shooting Range and Overshot Area, Sage Ranch Park, Ventura County, California.* May.

8. Stantec Consulting Services, Inc., 2022b. *Stormwater Pollution Prevention Plan for Former Shooting Range Remedial Action, Santa Susana Field Laboratory, Ventura County, California.* August.

9. U.S. Department of Energy, 2020a. *Stormwater Pollution Prevention Plan for HWMF Phase 1 Decommissioning and Demolition U.S. Department of Energy, Energy Technology Engineering Center – Area IV, Santa Susana Field Laboratory, Ventura County, California.* October.

10. U.S. Department of Energy, 2020b. *Stormwater Pollution Prevention Plan for HWMF Phase 1 Decommissioning and Demolition U.S. Department of Energy, Energy Technology Engineering Center – Area IV, Santa Susana Field Laboratory, Ventura County, California.* July.

11. U.S. Department of Energy, 2020c, *Stormwater Pollution Prevention Plan for CLIN 008 Phase I Decommissioning and Demolition, U.S. Department of Energy, Energy Technology Engineering Center – Area IV, Santa Susana Field Laboratory, Ventura County California.* December.

TABLES

TABLE 1
SWTS MAINTENANCE ACTIVITIES, SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

SWTS	Activities During Second Quarter 2024
011	– Performed maintenance and seasonal shutdown of the polymer pumps – Drained and cleaned the Oxidizer storage tank and the chemical lines – Purged coagulant, caustic, and acid chemical lines for seasonal shutdown – Transferred solids that were generated at SWTS 011 to SWTS 018 for processing – Completed draining the rapid clarifier unit for seasonal shutdown – Completed draining and rinsing the Oxidation tank for seasonal shutdown – Completed draining and rinsing the Plate Settler – Replaced belts on air compressors – Replaced the peristaltic pump tubes for the aluminum sulfate ($KMnO_4$)
018	– Completed installing new turbidity meters – Installed new coagulant pumps for the rapid clarifier unit – Installed new water heater for the polymer pump – Performed maintenance and seasonal shutdown of the polymer pumps – Drained and cleaned the Oxidizer storage tank and chemical lines – Purged coagulant, caustic, and acid chemical lines for seasonal shutdown – Replaced high-pressure water line in the screw drive for the shower unit on the Screw Press – Designed and installed new suction manifold for the coagulant pumps – Pressure-washed the screw drive inside the Screw Press – Completed draining the rapid clarifier unit for seasonal shutdown – Completed draining and rinsing the Oxidation tanks for seasonal shutdown – Completed draining and rinsing the Plate Settler – Replaced belts on air compressors – Changed the peristaltic pump tubes for the sodium hydroxide (NaOH)

TABLE 2
SWTS OPERATIONAL ACTIVITIES, SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

SWTS	Operational Event	Operational Dates and Hours	Total Amount of Water Treated and Discharged (gallons)
011	1	30 April through 1 May 2024, and discharged for approximately 22 hours	943,300 gallons
018	1	23 April through 26 April 2024, and discharged for approximately 74.5 hours	5,011,200 gallons

011	Solids are still being processed and will be reported in the Third Quarter 2024
018	Solids are still being processed and will be reported in the Third Quarter 2024

TABLE 3
SAMPLING RECORD, SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

Date (Grab)	Date (Composite)	Outfall/Location	Sample Frequency
4/14/2024	4/15/2024	Outfall 001	Routine
4/14/2024	4/15/2024	Outfall 002	Routine
4/14/2024	4/15/2024	Outfall 008	Routine
4/14/2024	4/15/2024	Outfall 009	Routine
4/14/2024	NA	Bell Canyon Receiving Water (RSW-001, Outfall 002)	Quarterly
4/14/2024	NA	Arroyo Simi Downstream Receiving Water (RSW-002)	Quarterly
4/14/2024	NA	Arroyo Simi Upstream Receiving Water (RSW-003)	Quarterly
4/22/2024	NA	SWTS 018 Influent (INF-002)	Routine
4/23/2024	4/24/2024	Outfall 002	Routine
4/23/2024	4/24/2024	Outfall 018	Routine
4/26/2024	NA	SWTS 011 Influent (INF-001)	Routine
4/30/2024	5/1/2024	Outfall 001	Routine
4/30/2024	5/1/2024	Outfall 011	Routine
6/13/2024	NA	Arroyo Simi Downstream Receiving Water (RSW-002)	Annual sediment

Notes:
NA = Not applicable.
Routine = 1 per discharge event.
Toxicity is required during the 1st and 2nd rain events that create flow at the outfall.

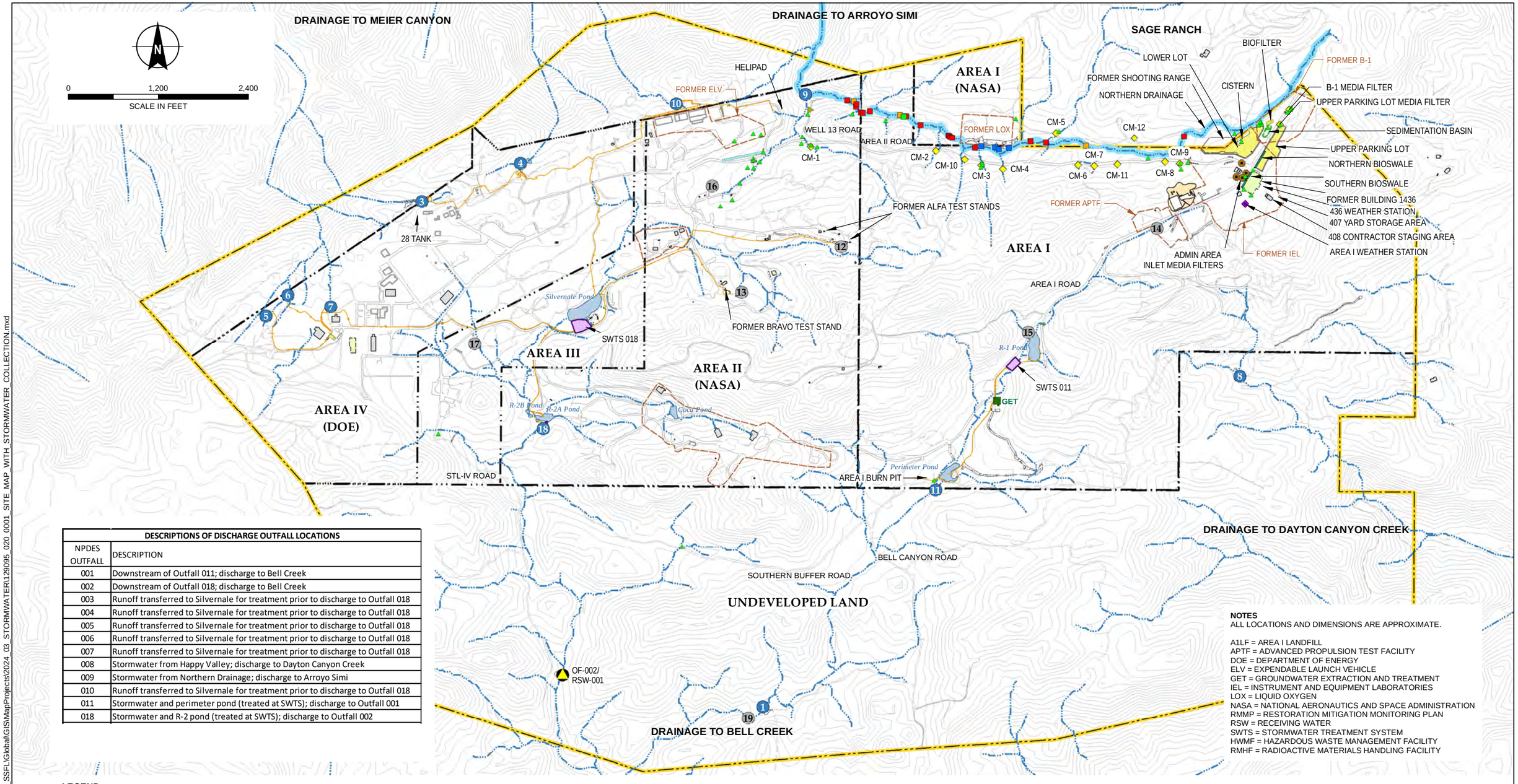
TABLE 4
BMP ACTIVITIES, SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

Outfall, Watershed, BMP, or Other Location	BMP Activities During Second Quarter 2024
SWPPP-Related Activities	
001	Replaced damaged solar panel and solar controller. Repaired damaged sample box. Repaired the roadway. Installed UV protective manifold to prevent tubing from getting damaged. Repaired the Autosampler strainer.
002	Removed tree litter blocking drainage and the flume. Repaired the roadway. Removed rock and debris from sample box.
003, 004, 005, 008, 010	Repaired the roadway. Performed weed abatement.
006	Repaired the roadway. Replaced the Autosampler pump tubing. Replaced fiber rolls.
007	Calibrated flow meter. Performed weed abatement. Removed tree branches next to retention basin.
009	Replaced solar panel and batteries for the flow meter. Removed sediment and debris from check structures on the roadway.
011	Repaired the roadway. Removed debris and vegetation in and around swale.
018	Performed weed abatement.
Perimeter Pond	Performed weed abatement on the conveyance lines from Perimeter Pond to R1 pond.
R-2A Pond	Performed weed abatement around the conveyance lines from R-2A to Silvernale. Replaced air relief valve on the discharge manifold on the conveyance pump.
Weather Station	Performed quarterly calibration Performed weed abatement
Helipad	Performed brush clearance around the valves behind retaining berm.
28 Tank Area	Repaired leak on High-density polyethylene (HDPE) manifold.
B-1 Slope	Performed weed abatement on the road leading to B-1 Slope.
Area I Burn Pit	Completed installing sand bag berm for Burn Pit remediation.
Other SWPPP-Related Activities	
Former Shooting Range	Performed BMP Inspections, upgrades, and repairs in accordance with the SWPPP for Former Shooting Range Remedial Action (Stantec, 2022b).
Area I Burn Pit	Performed BMP Inspections, upgrades, and repairs in accordance with the SWPPP for Area I Burn Pit Removal Action (Jacobs, 2023).

TABLE 4
BMP ACTIVITIES, SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

Outfall, Watershed, BMP, or Other Location	BMP Activities During Second Quarter 2024
Expert Panel-Related Activities	
Culvert Modifications (CM)	Performed BMP Inspections. Repaired concrete around the culvert discharge pipes.
B-1 Area	Performed BMP Inspections.
Upper Parking Lot Media Filter	Performed BMP Inspections. Performed weed abatement.
Former Building 1436 Detention Bioswales	Performed BMP Inspections. Removed sediment from bioswale inlets.
Lower Lot Biofilter (Sedimentation Basin and Biofilter)	Performed BMP Inspections. Approximately 142,300 gallons of stormwater were pumped from the cistern to the sedimentation basin during the Second Quarter 2024.
Administration Area Inlet Filters	Performed BMP Inspections. Removed debris and leaf litter.
NASA and Boeing BMP Monitoring-Related Activities	In addition to activities performed in coordination with the Expert Panel described above, BMP-related monitoring samples were collected at off-site background locations in the Second Quarter 2024. These sampling results will be reported by the Expert Panel in their 2024 Annual Report.

FIGURES



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.

A1LF = 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

- ACTIVE NPDES OUTFALL LOCATION
- FORMER NPDES OUTFALL LOCATION
- BELL CREEK RECEIVING WATER (RSW-001) SAMPLING LOCATION AND OUTFALL 002
- SLOPE DRAIN DISCHARGE POINT TO NORTHERN DRAINAGE
- CULVERT MODIFICATION
- CM-12
- ADMINISTRATION AREA DRAIN INLETS
- BMP MONITORING LOCATION
- GET SYSTEM
- STORMWATER TREATMENT SYSTEM
- FORMER STUDY AREA
- RMMP 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 AREA
- 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

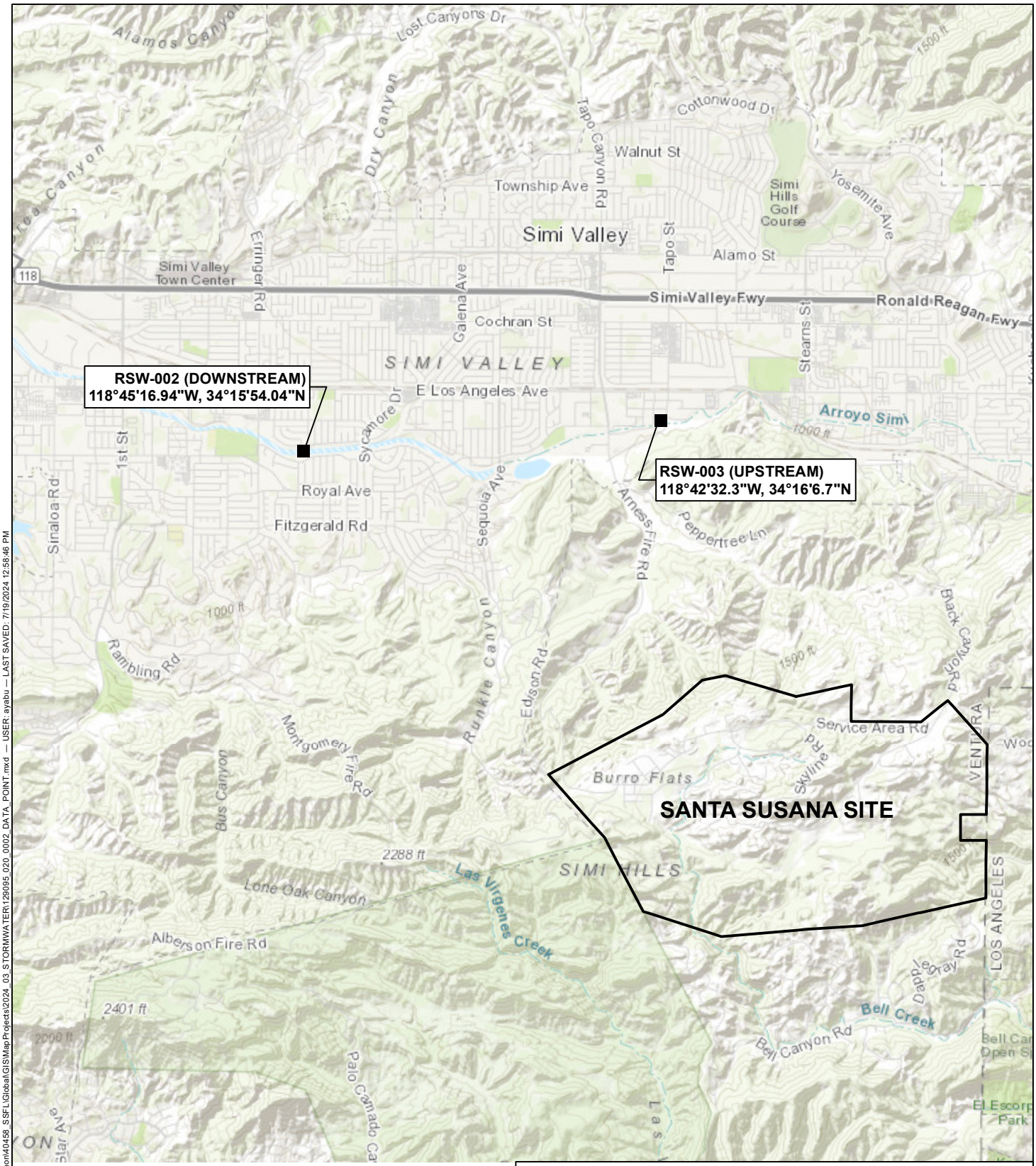
NPDES PERMIT COMPLIANCE SECOND QUARTER 2024
DISCHARGE MONITORING REPORT
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

SITE MAP WITH STORMWATER COLLECTION AND CONVEYANCE SYSTEM AND SITE FEATURES

AUGUST 2024

FIGURE 1

\\haleyaldrich.com\share\sdg_common\40458_SSFL\GlobalGIS\MapProjects\2024_03_STORMWATER\129095_020_0001_SITE_MAP_WITH_STORMWATER_COLLECTION.mxd



HALEY ALDRICH

NPDES PERMIT COMPLIANCE SECOND QUARTER 2024
DISCHARGE MONITORING REPORT
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

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

AUGUST 2024

FIGURE 2

GIS FILE PATH: \\haleyaldrich.com\share\sdg_common\40468_SSFL\Global\GIS\MapProjects\2024_03_STORMWATER\129095_020_0002_DATA_POINT.mxd — USER: ayabu — LAST SAVED: 7/19/2024 12:58:46 PM

APPENDIX A

Rainfall Data Summary, Second Quarter 2024

TABLE A
DAILY RAINFALL SUMMARY
SECOND QUARTER 2024
THE BOEING COMPANY - SSFL
NPDES PERMIT CA0001309

Station: AREA 1
Parameter: Inches of Rain
Month/Year: April 2024

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	
	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
	1	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	0.01
	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
	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
	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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	5	0.02	0.00	0.00	0.00	0.01	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	0.04
	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
	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
D	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
A	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
Y	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
	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
O	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
F	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	0.05	0.16	0.23	0.12	0.03	0.02	0.00	0.01	0.00	0.00	0.00	0.62
	14	0.00	0.00	0.00	0.02	0.05	0.08	0.01	0.07	0.00	0.00	0.02	0.05	0.15	0.11	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72
T	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
H	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
E	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
	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
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
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
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
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	0.01	0.01	0.01	0.03
H	23	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	0.01
	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
	25	0.00	0.00	0.00	0.00	0.00	0.00	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
	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
	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
	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
	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
	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
																									Monthly Total	1.44

Flags: d = Off-line part of hour. Invalid hour due to calibration (25 April). For the off-line event, the rain gauge at Sage Ranch did not record measurable rainfa on 25 April during hour 0700-0800.

TABLE A
DAILY RAINFALL SUMMARY
SECOND QUARTER 2024
THE BOEING COMPANY - SSFL
NPDES PERMIT CA0001309

Station: AREA 1
Parameter: Inches of Rain
Month/Year: May 2024

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	
	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
	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
	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
	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
	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	0.01	0.01
	5	0.01	0.01	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	0.03
	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
	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
D	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
A	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
Y	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
	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
O	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
F	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
	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
T	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
H	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
E	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
	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
M	19	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
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
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
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
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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	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
	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
	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
	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
	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
	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
	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
	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
																										0.06

TABLE A
DAILY RAINFALL SUMMARY
SECOND QUARTER 2024
THE BOEING COMPANY - SSFL
NPDES PERMIT CA0001309

Station: AREA 1
Parameter: Inches of Rain
Month/Year: June 2024

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	
	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
	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
	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
	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
	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
	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
	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
	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
D	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
A	9	0.00	0.00	0.00	0.00	0.00	0.01	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	0.02
Y	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
	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
O	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
F	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
	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
T	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
H	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
E	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
	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
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
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
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
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
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
	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
	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
	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
	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
	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
	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
	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

Monthly Total 0.02

APPENDIX B

Waste Shipment Summary Tables, Second Quarter 2024

TABLE B
WASTE SHIPMENT SUMMARY TABLE
SECOND QUARTER 2024
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 (Septic)	Liquid	28,800	G	United Pumping Service, Inc. 14000 E. Valley Boulevard City of Industry, CA 91746	n/a	A.K. Warren Water Resource Facility 24501 S. Figueroa Street Carson, CA 90745
Non Hazardous Waste	Liquid	70,000	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 2024

APPENDIX C

TABLE OF CONTENTS

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 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.
Deg F	Degrees Fahrenheit.

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

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.
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.
pCi/L	PicoCuries per liter.

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

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 µm, but data is provided in percent (%).

TABLE C-1.A
OUTFALLS 001, 002, 011, AND 018
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					Outfall 001				Outfall 001				Outfall 002			
				LOCATION												
				DATE RANGE	04/14/2024 08:30 - 04/15/2024 07:45				04/30/2024 09:50 - 05/01/2024 09:50				04/14/2024 08:50 - 04/15/2024 08:50			
ANALYTE	SAMPLE TYPE	UNITS	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER
1,1,2-Trichloro-1,2,2-trifluoroethane	Grab	µg/L	-	1/Discharge	ND	1.5	2	U *	ND	1.5	2	U *	ND	1.5	2	U *
1,1-Dichloroethene	Grab	µg/L	6.0	1/Discharge	ND	0.24	0.5	U *	ND	0.24	0.5	U *	ND	0.24	0.5	U *
1,1-Dichloroethene	Grab	lbs/day	5.9	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
1,2-Dichloro-1,1,2-trifluoroethane	Grab	µg/L	-	1/Discharge	ND	0.59	2	U *	ND	0.59	2	U *	ND	0.59	2	U *
1,2-Dichloroethane	Grab	µg/L	0.5	1/Discharge	ND	0.055	0.5	U *	ND	0.055	0.5	U *	ND	0.055	0.5	U *
1,2-Dichloroethane	Grab	lbs/day	0.49	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
1,4-Dioxane	Composite	µg/L	-	1/Discharge	ND	0.55	1	U *	ND	0.55	1	U *	ND	0.55	1	U *
2,2-Dichloro-1,1,1-trifluoroethane	Grab	µg/L	-	Additional[(h)]	ND	2.9	10	U *	ND	2.9	10	U *	ND	2.9	10	U *
2,4,6-Trichlorophenol	Composite	µg/L	13	1/Discharge	ND	0.13	0.95	U *	ND	0.13	0.96	U *	ND	0.14	0.97	U *
2,4,6-Trichlorophenol	Composite	lbs/day	12.8	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
2,4-Dinitrotoluene	Composite	µg/L	18	1/Discharge	ND	0.11	0.19	U *	ND	0.11	0.19	U *	ND	0.11	0.19	U *
2,4-Dinitrotoluene	Composite	lbs/day	17.7	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
3,3'-Dichlorobenzidine	Composite	µg/L	0.077	1/Discharge	ND	2.8	4.7	U *	ND	2.9	4.8	U *	ND	2.9	4.9	U *
3,3'-Dichlorobenzidine	Composite	lbs/day	0.076	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
4,4'-DDE	Composite	µg/L	0.00059	1/Discharge	ND	0.009	0.25	U *	ND	0.0036	0.1	U *	ND	0.009	0.25	U *
4,4'-DDE	Composite	lbs/day	0.00058	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
alpha-BHC	Composite	µg/L	0.03	1/Discharge	ND	0.012	0.25	U *	ND	0.0048	0.1	U *	ND	0.012	0.25	U *
alpha-BHC	Composite	lbs/day	0.03	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Aluminum	Composite	mg/L	1.0	1/Discharge	1.4	0.0086	0.015	--	0.26	0.0086	0.015	*	1.4	0.0086	0.015	--
Aluminum	Composite	lbs/day	983	1/Discharge	2.4	NA	NA	--	0.4	NA	NA	*	5.3	NA	NA	--
Aluminum, dissolved	Composite	mg/L	-	Additional/Discharge	0.037	0.0086	0.015	*	0.18	0.0086	0.015	*	0.016	0.0086	0.015	*
Ammonia - N	Composite	mg/L	10.1	1/Discharge	ND	0.029	0.075	U *	ND	0.029	0.075	U *	ND	0.029	0.075	U *
Ammonia - N	Composite	lbs/day	9,925	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Benzidine	Composite	µg/L	0.00054	1/Discharge	ND	2.6	4.7	U *	ND	2.6	4.8	U *	ND	2.6	4.9	U *
Benzidine	Composite	lbs/day	0.00053	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Biochemical Oxygen Demand (BOD)(5-Day @ 20 deg. C)	Composite	mg/L	30	1/Discharge	3.1	1	2	*	ND	1	2	U *	3.7	1	2	*
Biochemical Oxygen Demand (BOD)(5-Day @ 20 deg. C)	Composite	lbs/day	29,481	1/Discharge	5.3	NA	NA	*	ND	NA	NA	U *	14	NA	NA	*
Bis (2-Ethylhexyl) Phthalate	Composite	µg/L	4.0	1/Discharge	ND	3.4	4.7	U *	ND	3.5	4.8	U *	ND	3.5	4.9	U *
Bis (2-Ethylhexyl) Phthalate	Composite	lbs/day	3.93	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Cadmium	Composite	µg/L	3.1	1/Discharge	ND	0.13	1	U *	ND	0.13	1	U *	ND	0.13	1	U *
Cadmium	Composite	lbs/day	3.05	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Cadmium, dissolved	Composite	µg/L	-	Additional/Discharge	ND	0.13	1	U *	ND	0.13	1	U *	ND	0.13	1	U *
Chloride	Composite	mg/L	150	1/Discharge	21	0.36	1	*	12	0.72	2	*	32	0.36	1	*
Chloride	Composite	lbs/day	147,405	1/Discharge	36	NA	NA	*	19	NA	NA	*	120	NA	NA	*
cis-1,2-Dichloroethene	Grab	µg/L	-	1/Discharge	ND	0.098	0.5	U *	ND	0.098	0.5	U *	0.24	0.098	0.5	J (DNQ*)
Conductivity at 25 DEG C	Grab	umhos/cm	-	1/Discharge	440	1	1	*	760	1	1	*	1,200	1	1	*
Copper	Composite	µg/L	67.5	1/Discharge	2.6	0.32	2	*	2.6	0.32	2	*	2.2	0.32	2	*
Copper	Composite	lbs/day	66.3	1/Discharge	0.0045	NA	NA	*	0.004	NA	NA	*	0.0084	NA	NA	*
Copper, dissolved	Composite	µg/L	-	Additional/Discharge	1	0.32	2	J (DNQ*)	2.3	0.32	2	*	0.72	0.32	2	J (DNQ*)
Cyanide	Composite	µg/L	8.5	1/Discharge	ND	2.5	5	U *	ND	2.5	5	U *	ND	2.5	5	U *
Cyanide	Composite	lbs/day	8.4	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Cyclohexane	Grab	µg/L	-	1/Discharge	ND	0.75	2	U *	ND	0.75	2	U *	ND	0.75	2	U *
Detergents (as MBAS)	Composite	mg/L	0.5	1/Discharge	0.053	0.05	0.2	J (DNQ*)	0.13	0.05	0.2	J (DNQ*)	ND	0.05	0.2	U *
Detergents (as MBAS)	Composite	lbs/day	491.4	1/Discharge	0.091	NA	NA	J (DNQ*)	0.2	NA	NA	J (DNQ*)	ND	NA	NA	U *
Dissolved Oxygen (Field)	Grab	mg/L	-	1/Discharge	36.9	NM	NM	*	13.68	NM	NM	*	16.45	NM	NM	*
Flow**	Meas	mgd	117.83	1/Discharge	0.20548	NA	NA	*	0.18611	NA	NA	*	0.45596	NA	NA	*
Hardness	Composite	mg/L	-	Additional[(h)]	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	460	0.42	2	*
Hardness, Dissolved (as CaCO3)	Composite	mg/L	-	Additional[(h)]	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	400	0.5	7.1	*
Hardness (as CaCO3)	Composite	mg/L	-	Additional[(h)]	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	430	0.5	7.1	*
Heptachlor	Composite	µg/L	0.00042	1/Discharge	ND	0.012	0.25	U *	ND	0.0046	0.1	U *	ND	0.012	0.25	U *
Heptachlor	Composite	lbs/day	0.00041	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Indeno(1,2,3-cd)pyrene	Composite	µg/L	0.1	1/Discharge	ND	0.12	0.19	U *	ND	0.12	0.19	U *	ND	0.12	0.19	U *
Indeno(1,2,3-cd)pyrene	Composite	lbs/day	0.1	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Lead	Composite	µg/L	5.2	1/Discharge	1.1	0.12	1	*	ND	0.12	1	U *	1	0.12	1	*
Lead	Composite	lbs/day	5.1	1/Discharge	0.0019	NA	NA	*	ND	NA	NA	U *	0.004	NA	NA	*
Lead, dissolved	Composite	µg/L	-	Additional/Discharge	ND	0.12	1	U *	ND	0.12	1	U *	ND	0.12	1	U *

TABLE C-1.A
OUTFALLS 001, 002, 011, AND 018
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					Outfall 001				Outfall 001				Outfall 002			
				LOCATION												
				DATE RANGE	04/14/2024 08:30 - 04/15/2024 07:45				04/30/2024 09:50 - 05/01/2024 09:50				04/14/2024 08:50 - 04/15/2024 08:50			
ANALYTE	SAMPLE TYPE	UNITS	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER
Mercury	Composite	µg/L	0.1	1/Discharge	0.0049	0.0002	0.0005	*	0.0045	0.0002	0.0005	*	0.0031	0.0002	0.0005	*
Mercury	Composite	lbs/day	0.1	1/Discharge	0.0000084	NA	NA	*	0.000007	NA	NA	*	0.000012	NA	NA	*
Mercury, dissolved	Composite	µg/L	-	Additional/Discharge	0.0021	0.0002	0.0005	*	0.0039	0.0002	0.0005	*	0.0014	0.0002	0.0005	*
Methyl hydrazine	Composite	µg/L	-	1/Discharge	ND	0.62	2	U *	ND	0.62	2	U *	ND	0.62	2	U *
Nitrate - N	Composite	mg/L	8	1/Discharge	0.069	0.02	0.1	J (DNQ*)	ND	0.039	0.2	U *	ND	0.02	0.1	U *
Nitrate - N	Composite	lbs/day	7,862	1/Discharge	0.12	NA	NA	J (DNQ*)	ND	NA	NA	U *	ND	NA	NA	U *
Nitrate + Nitrite as Nitrogen (N)	Composite	mg/L	8	1/Discharge	0.31	0.02	0.1	*	ND	0.02	0.1	U *	0.34	0.02	0.1	*
Nitrate + Nitrite as Nitrogen (N)	Composite	lbs/day	7,862	1/Discharge	0.53	NA	NA	*	ND	NA	NA	U *	1.3	NA	NA	*
Nitrite - N	Composite	mg/L	1	1/Discharge	0.24	0.043	0.1	*	ND	0.086	0.2	U *	0.34	0.043	0.1	*
Nitrite - N	Composite	lbs/day	983	1/Discharge	0.41	NA	NA	*	ND	NA	NA	U *	1.3	NA	NA	*
N-Nitrosodimethylamine	Composite	µg/L	16	1/Discharge	ND	0.18	0.19	U *	ND	0.18	0.19	U *	ND	0.18	0.19	U *
N-Nitrosodimethylamine	Composite	lbs/day	15.72	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Oil & Grease	Grab	mg/L	15	1/Discharge	ND	0.5	0.99	U *	ND	0.5	0.98	U *	1.5	0.5	0.98	*
Oil & Grease	Grab	lbs/day	14,741	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	5.7	NA	NA	*
Pentachlorophenol	Composite	µg/L	1	1/Discharge	ND	0.8	0.95	U *	ND	0.81	0.96	U *	ND	0.82	0.97	U *
Pentachlorophenol	Composite	lbs/day	0.98	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
pH (Field)	Grab	s.u.	6.5-8.5	1/Discharge	7.41	NM	NM	*	8.2	NM	NM	*	8.03	NM	NM	*
Selenium	Composite	µg/L	8.2	1/Discharge	ND	0.52	2	U *	1.6	0.52	2	J (DNQ*)	0.54	0.52	2	J (DNQ*)
Selenium	Composite	lbs/day	8.1	1/Discharge	ND	NA	NA	U *	0.0025	NA	NA	J (DNQ*)	0.0021	NA	NA	J (DNQ*)
Selenium, dissolved	Composite	µg/L	-	Additional/Discharge	ND	0.52	2	U *	ND	0.52	2	U *	ND	0.52	2	U *
Settleable solids	Grab	mL/L	-	1/Discharge	ND	0.1	0.1	U *	ND	0.1	0.1	U *	0.1	0.1	0.1	*
Sulfate	Composite	mg/L	300	1/Discharge	76	0.18	1	*	61	0.37	2	*	310	1.8	10	--
Sulfate	Composite	lbs/day	294,810	1/Discharge	130	NA	NA	*	95	NA	NA	*	1,200	NA	NA	--
Temperature (Field)	Grab	Deg F	80	1/Discharge	42.2	NM	NM	*	58.4	NM	NM	*	46.1	NM	NM	*
Total Dissolved Solids	Composite	mg/L	950	1/Discharge	280	8.7	10	*	300	8.7	10	*	760	8.7	10	*
Total Dissolved Solids	Composite	lbs/day	933,565	1/Discharge	480	NA	NA	*	500	NA	NA	*	2,900	NA	NA	*
Total Suspended Solids	Composite	mg/L	-	1/Discharge	29	0.8	1	*	2.5	0.8	1	*	39	1	1.3	*
Total Suspended Solids	Composite	lbs/day	-	1/Discharge	50	NA	NA	*	3.9	NA	NA	*	150	NA	NA	*
Trichloroethene	Grab	µg/L	5.0	1/Discharge	ND	0.1	0.5	U *	ND	0.1	0.5	U *	ND	0.1	0.5	U *
Trichloroethene	Grab	lbs/day	4.9	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Turbidity	Composite	NTU	-	1/Discharge	55	0.05	0.05	*	2.2	0.05	0.05	*	65	0.05	0.05	*
Zinc	Composite	µg/L	159	1/Discharge	9.1	2.8	20	J (DNQ*)	ND	2.8	20	U *	9.4	2.8	20	J (DNQ*)
Zinc	Composite	lbs/day	156.25	1/Discharge	0.016	NA	NA	J (DNQ*)	ND	NA	NA	U *	0.036	NA	NA	J (DNQ*)
Zinc, dissolved	Composite	µg/L	-	Additional/Discharge	ND	2.8	20	U *	ND	2.8	20	U *	ND	2.8	20	U *

TABLE C-1.A
OUTFALLS 001, 002, 011, AND 018
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					Outfall 002				Outfall 011				Outfall 018			
				LOCATION												
				DATE RANGE	04/23/2024 11:30 - 04/24/2024 11:10				04/30/2024 09:05 - 05/01/2024 08:50				04/23/2024 10:35 - 04/24/2024 10:40			
ANALYTE	SAMPLE TYPE	UNITS	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER
1,1,2-Trichloro-1,2,2-trifluoroethane	Grab	µg/L	-	1/Discharge	ND	1.5	2	U *	ND	1.5	2	U *	ND	1.5	2	U *
1,1-Dichloroethene	Grab	µg/L	6.0	1/Discharge	ND	0.24	0.5	U *	ND	0.24	0.5	U *	ND	0.24	0.5	U *
1,1-Dichloroethene	Grab	lbs/day	5.9	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
1,2-Dichloro-1,1,2-trifluoroethane	Grab	µg/L	-	1/Discharge	ND	0.59	2	U *	ND	0.59	2	U *	ND	0.59	2	U *
1,2-Dichloroethane	Grab	µg/L	0.5	1/Discharge	ND	0.055	0.5	U *	ND	0.055	0.5	U *	ND	0.055	0.5	U *
1,2-Dichloroethane	Grab	lbs/day	0.49	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
1,4-Dioxane	Composite	µg/L	-	1/Discharge	ND	0.55	1	U *	ND	0.55	1	U *	ND	0.55	1	U *
2,2-Dichloro-1,1,1-trifluoroethane	Grab	µg/L	-	Additional[(h)]	ND	2.9	10	U *	ND	2.9	10	U *	ND	2.9	10	U *
2,4,6-Trichlorophenol	Composite	µg/L	13	1/Discharge	ND	0.13	0.97	U *	ND	0.13	0.95	U *	ND	0.14	0.97	U *
2,4,6-Trichlorophenol	Composite	lbs/day	12.8	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
2,4-Dinitrotoluene	Composite	µg/L	18	1/Discharge	ND	0.11	0.19	U *	ND	0.11	0.19	U *	ND	0.11	0.19	U *
2,4-Dinitrotoluene	Composite	lbs/day	17.7	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
3,3'-Dichlorobenzidine	Composite	µg/L	0.077	1/Discharge	ND	2.9	4.9	U *	ND	2.9	4.8	U *	ND	2.9	4.9	U *
3,3'-Dichlorobenzidine	Composite	lbs/day	0.076	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
4,4'-DDE	Composite	µg/L	0.00059	1/Discharge	ND	0.0036	0.1	U *	ND	0.0036	0.1	U *	ND	0.0036	0.1	U *
4,4'-DDE	Composite	lbs/day	0.00058	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
alpha-BHC	Composite	µg/L	0.03	1/Discharge	ND	0.0048	0.1	U *	ND	0.0048	0.1	U *	ND	0.0048	0.1	U *
alpha-BHC	Composite	lbs/day	0.03	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Aluminum	Composite	mg/L	1.0	1/Discharge	0.11	0.0086	0.015	*	0.35	0.0086	0.015	*	0.021	0.0086	0.015	*
Aluminum	Composite	lbs/day	983	1/Discharge	1.5	NA	NA	*	3	NA	NA	*	0.137	NA	NA	*
Aluminum, dissolved	Composite	mg/L	-	Additional/Discharge	ND	0.0086	0.015	U *	0.22	0.0086	0.015	*	0.018	0.0086	0.015	*
Ammonia - N	Composite	mg/L	10.1	1/Discharge	ND	0.029	0.075	U *	ND	0.029	0.075	U *	0.038	0.029	0.075	J (DNQ*)
Ammonia - N	Composite	lbs/day	9,925	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	0.25	NA	NA	J (DNQ*)
Benzidine	Composite	µg/L	0.00054	1/Discharge	ND	2.6	4.9	U *	ND	2.6	4.8	U *	ND	2.6	4.9	U *
Benzidine	Composite	lbs/day	0.00053	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Biochemical Oxygen Demand (BOD)(5-Day @ 20 deg. C)	Composite	mg/L	30	1/Discharge	ND	1	2	U *	1.3	1	2	J (DNQ*)	ND	1	2	U *
Biochemical Oxygen Demand (BOD)(5-Day @ 20 deg. C)	Composite	lbs/day	29,481	1/Discharge	ND	NA	NA	U *	11	NA	NA	J (DNQ*)	ND	NA	NA	U *
Bis (2-Ethylhexyl) Phthalate	Composite	µg/L	4.0	1/Discharge	ND	3.5	4.9	U *	ND	3.4	4.8	U *	ND	3.5	4.9	U *
Bis (2-Ethylhexyl) Phthalate	Composite	lbs/day	3.93	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Cadmium	Composite	µg/L	3.1	1/Discharge	ND	0.13	1	U *	ND	0.13	1	U *	ND	0.13	1	U *
Cadmium	Composite	lbs/day	3.05	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Cadmium, dissolved	Composite	µg/L	-	Additional/Discharge	ND	0.13	1	U *	ND	0.13	1	U *	ND	0.13	1	U *
Chloride	Composite	mg/L	150	1/Discharge	20	0.36	1	*	10	0.36	1	*	18	0.36	1	*
Chloride	Composite	lbs/day	147,405	1/Discharge	300	NA	NA	*	80	NA	NA	*	120	NA	NA	*
cis-1,2-Dichloroethene	Grab	µg/L	-	1/Discharge	ND	0.098	0.5	U *	ND	0.098	0.5	U *	ND	0.098	0.5	U *
Conductivity at 25 DEG C	Grab	umhos/cm	-	1/Discharge	1,200	1	1	*	370	1	1	*	540	1	1	*
Copper	Composite	µg/L	67.5	1/Discharge	1.4	0.32	2	J (DNQ*)	3.1	0.32	2	*	1.4	0.32	2	J (DNQ*)
Copper	Composite	lbs/day	66.3	1/Discharge	0.019	NA	NA	J (DNQ*)	0.026	NA	NA	*	0.0092	NA	NA	J (DNQ*)
Copper, dissolved	Composite	µg/L	-	Additional/Discharge	1.1	0.32	2	J (DNQ*)	2.7	0.32	2	*	1.3	0.32	2	J (DNQ*)
Cyanide	Composite	µg/L	8.5	1/Discharge	ND	2.5	5	U *	ND	2.5	5	U *	ND	2.5	5	U *
Cyanide	Composite	lbs/day	8.4	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Cyclohexane	Grab	µg/L	-	1/Discharge	ND	0.75	2	U *	ND	0.75	2	U *	ND	0.75	2	U *
Detergents (as MBAS)	Composite	mg/L	0.5	1/Discharge	ND	0.05	0.2	U *	0.092	0.05	0.2	J (DNQ*)	ND	0.05	0.2	U *
Detergents (as MBAS)	Composite	lbs/day	491.4	1/Discharge	ND	NA	NA	U *	0.78	NA	NA	J (DNQ*)	ND	NA	NA	U *
Dissolved Oxygen (Field)	Grab	mg/L	-	1/Discharge	10.01	NM	NM	*	10	NM	NM	*	12.3	NM	NM	*
Flow**	Meas	mgd	117.83	1/Discharge	1.5906	NA	NA	*	1.0166	NA	NA	*	0.78424	NA	NA	*
Hardness	Composite	mg/L	-	Additional[(h)]	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR
Hardness, Dissolved (as CaCO3)	Composite	mg/L	-	Additional[(h)]	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR
Hardness (as CaCO3)	Composite	mg/L	-	Additional[(h)]	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR	ANR
Heptachlor	Composite	µg/L	0.00042	1/Discharge	ND	0.0046	0.1	U *	ND	0.0046	0.1	U *	ND	0.0046	0.1	U *
Heptachlor	Composite	lbs/day	0.00041	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Indeno(1,2,3-cd)pyrene	Composite	µg/L	0.1	1/Discharge	ND	0.12	0.19	U *	ND	0.12	0.19	U *	ND	0.12	0.19	U *
Indeno(1,2,3-cd)pyrene	Composite	lbs/day	0.1	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Lead	Composite	µg/L	5.2	1/Discharge	ND	0.12	1	U *	ND	0.12	1	U *	ND	0.12	1	U *
Lead	Composite	lbs/day	5.1	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Lead, dissolved	Composite	µg/L	-	Additional/Discharge	ND	0.12	1	U *	ND	0.12	1	U *	ND	0.12	1	U *

TABLE C-1.A
OUTFALLS 001, 002, 011, AND 018
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					Outfall 002				Outfall 011				Outfall 018			
				LOCATION												
				DATE RANGE	04/23/2024 11:30 - 04/24/2024 11:10				04/30/2024 09:05 - 05/01/2024 08:50				04/23/2024 10:35 - 04/24/2024 10:40			
ANALYTE	SAMPLE TYPE	UNITS	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER
Mercury	Composite	µg/L	0.1	1/Discharge	0.0016	0.0002	0.0005	*	0.0049	0.0002	0.0005	*	0.0016	0.0002	0.0005	*
Mercury	Composite	lbs/day	0.1	1/Discharge	0.000021	NA	NA	*	0.000042	NA	NA	*	0.00001	NA	NA	*
Mercury, dissolved	Composite	µg/L	-	Additional/Discharge	0.0012	0.0002	0.0005	*	0.0039	0.0002	0.0005	*	0.0013	0.0002	0.0005	*
Methyl hydrazine	Composite	µg/L	-	1/Discharge	ND	0.62	2	U *	ND	0.62	2	U *	ND	0.62	2	U *
Nitrate - N	Composite	mg/L	8	1/Discharge	0.02	0.02	0.1	J (DNQ*)	0.027	0.02	0.1	J (DNQ*)	0.038	0.02	0.1	J (DNQ*)
Nitrate - N	Composite	lbs/day	7,862	1/Discharge	0.3	NA	NA	J (DNQ*)	0.23	NA	NA	J (DNQ*)	0.25	NA	NA	J (DNQ*)
Nitrate + Nitrite as Nitrogen (N)	Composite	mg/L	8	1/Discharge	0.29	0.02	0.1	*	0.027	0.02	0.1	J (DNQ*)	0.28	0.02	0.1	*
Nitrate + Nitrite as Nitrogen (N)	Composite	lbs/day	7,862	1/Discharge	3.8	NA	NA	*	0.23	NA	NA	J (DNQ*)	1.8	NA	NA	*
Nitrite - N	Composite	mg/L	1	1/Discharge	0.27	0.043	0.1	*	ND	0.043	0.1	U *	0.24	0.043	0.1	*
Nitrite - N	Composite	lbs/day	983	1/Discharge	3.6	NA	NA	*	ND	NA	NA	U *	1.6	NA	NA	*
N-Nitrosodimethylamine	Composite	µg/L	16	1/Discharge	ND	0.18	0.19	U *	ND	0.18	0.19	U *	ND	0.18	0.19	U *
N-Nitrosodimethylamine	Composite	lbs/day	15.72	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Oil & Grease	Grab	mg/L	15	1/Discharge	ND	0.49	0.96	U *	ND	0.5	0.98	U *	ND	0.51	1	U *
Oil & Grease	Grab	lbs/day	14,741	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Pentachlorophenol	Composite	µg/L	1	1/Discharge	ND	0.82	0.97	U *	ND	0.81	0.95	U *	ND	0.82	0.97	U *
Pentachlorophenol	Composite	lbs/day	0.98	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
pH (Field)	Grab	s.u.	6.5-8.5	1/Discharge	8.01	NM	NM	*	7.88	NM	NM	*	7.57	NM	NM	*
Selenium	Composite	µg/L	8.2	1/Discharge	ND	0.52	2	U *	ND	0.52	2	U *	ND	0.52	2	U *
Selenium	Composite	lbs/day	8.1	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Selenium, dissolved	Composite	µg/L	-	Additional/Discharge	0.55	0.52	2	J (DNQ*)	0.6	0.52	2	J (DNQ*)	ND	0.52	2	U *
Settleable solids	Grab	mL/L	-	1/Discharge	ND	0.1	0.1	U *	ND	0.1	0.1	U *	ND	0.1	0.1	U *
Sulfate	Composite	mg/L	300	1/Discharge	140	1.8	10	*	59	0.18	1	*	100	0.92	5	*
Sulfate	Composite	lbs/day	294,810	1/Discharge	1,900	NA	NA	*	500	NA	NA	*	700	NA	NA	*
Temperature (Field)	Grab	Deg F	80	1/Discharge	60.87	NM	NM	*	61.8	NM	NM	*	61.79	NM	NM	*
Total Dissolved Solids	Composite	mg/L	950	1/Discharge	410	8.7	10	*	230	8.7	10	*	330	8.7	10	*
Total Dissolved Solids	Composite	lbs/day	933,565	1/Discharge	5,400	NA	NA	*	2,000	NA	NA	*	2,200	NA	NA	*
Total Suspended Solids	Composite	mg/L	-	1/Discharge	3.3	0.8	1	*	ND	0.8	1	U *	ND	0.8	1	U *
Total Suspended Solids	Composite	lbs/day	-	1/Discharge	44	NA	NA	*	ND	NA	NA	U *	ND	NA	NA	U *
Trichloroethene	Grab	µg/L	5.0	1/Discharge	ND	0.1	0.5	U *	ND	0.1	0.5	U *	ND	0.1	0.5	U *
Trichloroethene	Grab	lbs/day	4.9	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Turbidity	Composite	NTU	-	1/Discharge	6	0.05	0.05	*	0.5	0.05	0.05	*	0.1	0.05	0.05	*
Zinc	Composite	µg/L	159	1/Discharge	ND	2.8	20	U *	ND	2.8	20	U *	ND	2.8	20	U *
Zinc	Composite	lbs/day	156.25	1/Discharge	ND	NA	NA	U *	ND	NA	NA	U *	ND	NA	NA	U *
Zinc, dissolved	Composite	µg/L	-	Additional/Discharge	ND	2.8	20	U *	ND	2.8	20	U *	ND	2.8	20	U *

TABLE C-1.B
OUTFALL 008
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					LOCATION	Outfall 008			
					DATE RANGE	04/14/2024 08:10 - 04/15/2024 08:15			
ANALYTE	SAMPLE TYPE	UNITS	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER
3,3'-Dichlorobenzidine	Composite	µg/L	0.077	1/Discharge	ND	2.9	4.9	U *
3,3'-Dichlorobenzidine	Composite	lbs/day	0.0046	1/Discharge	ND	NA	NA	U *
4,4'-DDE	Composite	µg/L	0.00059	1/Discharge	ND	0.0036	0.1	U *
4,4'-DDE	Composite	lbs/day	0.000035	1/Discharge	ND	NA	NA	U *
Aluminum	Composite	mg/L	1.0	1/Discharge	0.14	0.0086	0.015	*
Aluminum	Composite	lbs/day	60	1/Discharge	0.14	NA	NA	*
Aluminum, dissolved	Composite	mg/L	-	Additional/Discharge	0.028	0.0086	0.015	*
Ammonia - N	Composite	mg/L	10.1	1/Discharge	ND	0.029	0.075	U *
Ammonia - N	Composite	lbs/day	607.3	1/Discharge	ND	NA	NA	U *
Arsenic	Composite	µg/L	10	1/Discharge	1.1	0.16	1	*
Arsenic	Composite	lbs/day	0.6	1/Discharge	0.0011	NA	NA	*
Arsenic, dissolved	Composite	µg/L	-	Additional/Discharge	1	0.16	1	*
Benzidine	Composite	µg/L	0.00054	1/Discharge	ND	2.7	4.9	U *
Benzidine	Composite	lbs/day	0.000032	1/Discharge	ND	NA	NA	U *
Bis (2-Ethylhexyl) Phthalate	Composite	µg/L	-	1/Discharge	ND	3.5	4.9	U *
Cadmium	Composite	µg/L	3.1	1/Discharge	ND	0.13	1	U *
Cadmium	Composite	lbs/day	0.19	1/Discharge	ND	NA	NA	U *
Cadmium, dissolved	Composite	µg/L	-	Additional/Discharge	ND	0.13	1	U *
Chloride	Composite	mg/L	150	1/Discharge	7.1	0.36	1	*
Chloride	Composite	lbs/day	9,020	1/Discharge	7.2	NA	NA	*
Copper	Composite	µg/L	67.5	1/Discharge	1.3	0.32	2	J (DNQ*)
Copper	Composite	lbs/day	4.1	1/Discharge	0.0013	NA	NA	J (DNQ*)
Copper, dissolved	Composite	µg/L	-	Additional/Discharge	1.1	0.32	2	J (DNQ*)
Cyanide	Composite	µg/L	9.5	1/Discharge	ND	2.5	5	U *
Cyanide	Composite	lbs/day	0.57	1/Discharge	ND	NA	NA	U *
Detergents (as MBAS)	Composite	mg/L	-	1/Discharge	0.058	0.05	0.2	J (DNQ*)
Dissolved Oxygen (Field)	Grab	mg/L	-	1/Discharge	8.73	NM	NM	*
Flow**	Meas	mgd	7.21	1/Discharge	0.122	NA	NA	*
Fluoride	Composite	mg/L	1.6	Additional[(h)]	0.16	0.046	0.1	*
Fluoride	Composite	lbs/day	96.2	Additional[(h)]	0.16	NA	NA	*
Lead	Composite	µg/L	5.2	1/Discharge	0.15	0.12	1	J (DNQ*)
Lead	Composite	lbs/day	0.31	1/Discharge	0.00015	NA	NA	J (DNQ*)
Lead, dissolved	Composite	µg/L	-	Additional/Discharge	ND	0.12	1	U *
Mercury	Composite	µg/L	0.024	1/Discharge	0.0047	0.0002	0.0005	*
Mercury	Composite	lbs/day	0.0014	1/Discharge	0.0000048	NA	NA	*
Mercury, dissolved	Composite	µg/L	-	Additional/Discharge	0.0036	0.0002	0.0005	*
Nitrate - N	Composite	mg/L	8.0	1/Discharge	0.3	0.02	0.1	*
Nitrate - N	Composite	lbs/day	481	1/Discharge	0.3	NA	NA	*
Nitrate + Nitrite as Nitrogen (N)	Composite	mg/L	8.0	1/Discharge	0.46	0.02	0.1	*
Nitrate + Nitrite as Nitrogen (N)	Composite	lbs/day	481	1/Discharge	0.47	NA	NA	*
Nitrite - N	Composite	mg/L	1.0	1/Discharge	0.16	0.043	0.1	*
Nitrite - N	Composite	lbs/day	60	1/Discharge	0.16	NA	NA	*
Oil & Grease	Grab	mg/L	15	1/Discharge	ND	0.49	0.97	U *
Oil & Grease	Grab	lbs/day	902	1/Discharge	ND	NA	NA	U *
Pentachlorophenol	Composite	µg/L	-	1/Discharge	ND	0.83	0.98	U *
Perchlorate	Composite	µg/L	6.0	1/Discharge	ND	0.91	2	U *
Perchlorate	Composite	lbs/day	0.36	1/Discharge	ND	NA	NA	U *
pH (Field)	Grab	s.u.	6.5-8.5	1/Discharge	7.93	NM	NM	*
Settleable solids	Grab	mL/L	-	1/Discharge	ND	0.1	0.1	U *
Sulfate	Composite	mg/L	300	1/Discharge	4.4	0.18	1	*
Sulfate	Composite	lbs/day	18,039	1/Discharge	4.5	NA	NA	*
Temperature (Field)	Grab	Deg F	80	1/Discharge	42.3	NM	NM	*
Total Dissolved Solids	Composite	mg/L	950	1/Discharge	150	8.7	10	*
Total Dissolved Solids	Composite	lbs/day	57,124	1/Discharge	150	NA	NA	*
Total Suspended Solids	Composite	mg/L	-	1/Discharge	1.4	0.8	1	*
Zinc	Composite	µg/L	159	1/Discharge	3.4	2.8	20	J (DNQ*)
Zinc	Composite	lbs/day	9.6	1/Discharge	0.0035	NA	NA	J (DNQ*)
Zinc, dissolved	Composite	µg/L	-	Additional/Discharge	3.2	2.8	20	J (DNQ*)

TABLE C-1.C
OUTFALL 009
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

				LOCATION	**Outfall 009**			
				DATE RANGE	**04/14/2024 09:15 - 04/15/2024 09:40**			
ANALYTE	**SAMPLE TYPE**	**UNITS**	**DAILY MAXIMUM LIMIT**	**SAMPLE FREQUENCY**	**RESULT**	**MDL**	**RL**	**LAB/ VALIDATION QUALIFIER**
3,3'-Dichlorobenzidine	Composite	µg/L	-	1/Discharge	ND	2.9	4.8	U *
4,4'-DDE	Composite	µg/L	-	1/Discharge	ND	0.0036	0.1	U *
Aluminum	Composite	mg/L	1.0	1/Discharge	2.3	0.0086	0.015	--
Aluminum	Composite	lbs/day	537	1/Discharge	4.5	NA	NA	--
Aluminum, dissolved	Composite	mg/L	-	Additional/Discharge	0.24	0.0086	0.015	*
Ammonia - N	Composite	mg/L	-	1/Discharge	ND	0.029	0.075	U *
Arsenic	Composite	µg/L	-	1/Discharge	1.9	0.16	1	*
Arsenic, dissolved	Composite	µg/L	-	Additional/Discharge	0.89	0.16	1	J (DNQ*)
Benzidine	Composite	µg/L	-	1/Discharge	ND	2.6	4.8	U *
Bis (2-Ethylhexyl) Phthalate	Composite	µg/L	4.0	1/Discharge	ND	3.4	4.8	U *
Bis (2-Ethylhexyl) Phthalate	Composite	lbs/day	2.1	1/Discharge	ND	NA	NA	U *
Cadmium	Composite	µg/L	4.0	1/Discharge	ND	0.13	1	U *
Cadmium	Composite	lbs/day	2.1	1/Discharge	ND	NA	NA	U *
Cadmium, dissolved	Composite	µg/L	-	Additional/Discharge	ND	0.13	1	U *
Chloride	Composite	mg/L	150	1/Discharge	8.7	0.36	1	*
Chloride	Composite	lbs/day	80,477	1/Discharge	17	NA	NA	*
Copper	Composite	µg/L	31	1/Discharge	4.3	0.32	2	*
Copper	Composite	lbs/day	16.6	1/Discharge	0.0084	NA	NA	*
Copper, dissolved	Composite	µg/L	-	Additional/Discharge	1.9	0.32	2	J (DNQ*)
Cyanide	Composite	µg/L	9.5	1/Discharge	ND	2.5	5	U *
Cyanide	Composite	lbs/day	5.1	1/Discharge	ND	NA	NA	U *
Detergents (as MBAS)	Composite	mg/L	-	1/Discharge	0.068	0.05	0.2	J (DNQ*)
Dissolved Oxygen (Field)	Grab	mg/L	-	1/Discharge	32.96	NM	NM	*
Flow**	Meas	mgd	64.33	1/Discharge	0.2330	NA	NA	*
Fluoride	Composite	mg/L	1.6	Additional[(h)]	0.13	0.046	0.1	*
Fluoride	Composite	lbs/day	858	Additional[(h)]	0.25	NA	NA	*
Lead	Composite	µg/L	5.2	1/Discharge	14	0.12	1	--
Lead	Composite	lbs/day	2.8	1/Discharge	0.027	NA	NA	--
Lead, dissolved	Composite	µg/L	-	Additional/Discharge	0.79	0.12	1	J (DNQ*)
Mercury	Composite	µg/L	0.024	1/Discharge	0.009	0.0002	0.0005	*
Mercury	Composite	lbs/day	0.013	1/Discharge	0.00002	NA	NA	*
Mercury, dissolved	Composite	µg/L	-	Additional/Discharge	0.004	0.0002	0.0005	*
Nitrate - N	Composite	mg/L	-	1/Discharge	0.2	0.02	0.1	*
Nitrate + Nitrite as Nitrogen (N)	Composite	mg/L	10	1/Discharge	0.33	0.02	0.1	*
Nitrate + Nitrite as Nitrogen (N)	Composite	lbs/day	5,365	1/Discharge	0.64	NA	NA	*
Nitrite - N	Composite	mg/L	-	1/Discharge	0.13	0.043	0.1	*
Oil & Grease	Grab	mg/L	15	1/Discharge	ND	0.51	1	U *
Oil & Grease	Grab	lbs/day	8,048	1/Discharge	ND	NA	NA	U *
Pentachlorophenol	Composite	µg/L	1.0	1/Discharge	ND	0.81	0.96	U *
Pentachlorophenol	Composite	lbs/day	0.54	1/Discharge	ND	NA	NA	U *
Perchlorate	Composite	µg/L	6.0	1/Discharge	ND	0.91	2	U *
Perchlorate	Composite	lbs/day	3.22	1/Discharge	ND	NA	NA	U *
pH (Field)	Grab	s.u.	6.5-8.5	1/Discharge	7.35	NM	NM	*
Settleable solids	Grab	mL/L	-	1/Discharge	0.15	0.1	0.1	*
Sulfate	Composite	mg/L	250	1/Discharge	18	0.18	1	*
Sulfate	Composite	lbs/day	134,128	1/Discharge	35	NA	NA	*
Temperature (Field)	Grab	Deg F	80	1/Discharge	45.3	NM	NM	*
Total Dissolved Solids	Composite	mg/L	850	1/Discharge	130	8.7	10	*
Total Dissolved Solids	Composite	lbs/day	456,034	1/Discharge	250	NA	NA	*
Total Suspended Solids	Composite	mg/L	-	1/Discharge	41	1	1.3	*
Zinc	Composite	µg/L	120	1/Discharge	15	2.8	20	J (DNQ*)
Zinc	Composite	lbs/day	64.4	1/Discharge	0.029	NA	NA	J (DNQ*)
Zinc, dissolved	Composite	µg/L	-	Additional/Discharge	ND	2.8	20	U *

TABLE C-2
SWTS 011 (INF-001) AND SWTS 018 (INF-002)
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

				LOCATION	**SWTS 011 (INF-001)**				**SWTS 018 (INF-002)**			
				DATE RANGE	**4/26/2024 10:30:00 AM**				**4/22/2024 11:20:00 AM**			
ANALYTE	**SAMPLE TYPE**	**UNITS**	**DAILY MAXIMUM LIMIT**	**SAMPLE FREQUENCY**	**RESULT**	**MDL**	**RL**	**LAB/ VALIDATION QUALIFIER**	**RESULT**	**MDL**	**RL**	**LAB/ VALIDATION QUALIFIER**
1,1,2-Trichloro-1,2,2-trifluoroethane	Grab	µg/L	-	1/Discharge	ND	2.9	4	U *	ND	1.5	2	U *
1,1-Dichloroethene	Grab	µg/L	-	1/Discharge	ND	0.47	1	U *	ND	0.24	0.5	U *
1,2-Dichloro-1,1,2-trifluoroethane	Grab	µg/L	-	1/Discharge	ND	1.2	4	U *	ND	0.59	2	U *
1,2-Dichloroethane	Grab	µg/L	-	1/Discharge	ND	0.11	1	U *	ND	0.055	0.5	U *
1,4-Dioxane	Grab	µg/L	-	1/Discharge	ND	1.1	2	U *	ND	0.55	1	U *
2,2-Dichloro-1,1,1-trifluoroethane	Grab	µg/L	-	Additional[(h)]	ND	5.8	20	U *	ND	2.9	10	U *
2,4,6-Trichlorophenol	Grab	µg/L	-	1/Discharge	ND	0.14	0.98	U *	ND	0.14	0.98	U *
2,4-Dinitrotoluene	Grab	µg/L	-	1/Discharge	ND	0.11	0.2	U *	ND	0.11	0.2	U *
4,4'-DDE	Grab	µg/L	-	1/Discharge	ND	0.009	0.25	U *	ND	0.009	0.25	U *
alpha-BHC	Grab	µg/L	-	1/Discharge	ND	0.012	0.25	U *	ND	0.012	0.25	U *
Ammonia - N	Grab	mg/L	-	1/Discharge	0.039	0.029	0.075	J (DNQ*)	ND	0.029	0.075	U *
Biochemical Oxygen Demand (BOD)(5-Day @ 20 deg. C)	Grab	mg/L	-	1/Discharge	1.5	1	2	J (DNQ*)	1.1	1	2	J (DNQ*)
Bis (2-Ethylhexyl) Phthalate	Grab	µg/L	-	1/Discharge	ND	3.5	4.9	U *	ND	3.5	4.9	U *
Cadmium	Grab	µg/L	-	1/Discharge	ND	0.13	1	U *	ND	0.13	1	U *
Cadmium, dissolved	Grab	µg/L	-	Additional/Discharge	ND	0.13	1	U *	ND	0.13	1	U *
Chloride	Grab	mg/L	-	1/Discharge	3.8	0.36	1	*	18	0.36	1	*
cis-1,2-Dichloroethene	Grab	µg/L	-	1/Discharge	ND	0.2	1	U *	ND	0.098	0.5	U *
Conductivity at 25 DEG C	Grab	umhos/cm	-	1/Discharge	260	1	1	*	470	1	1	*
Copper	Grab	µg/L	-	1/Discharge	6	0.32	2	*	2.4	0.32	2	*
Copper, dissolved	Grab	µg/L	-	Additional/Discharge	5.1	0.32	2	*	2.2	0.32	2	*
Cyanide	Grab	µg/L	-	1/Discharge	ND	2.5	5	U *	ND	2.5	5	U *
Cyclohexane	Grab	µg/L	-	1/Discharge	ND	1.5	4	U *	ND	0.75	2	U *
Detergents (as MBAS)	Grab	mg/L	-	1/Discharge	0.086	0.05	0.2	J (DNQ*)	0.06	0.05	0.2	J (DNQ*)
Dissolved Oxygen (Field)	Grab	mg/L	-	1/Discharge	8.51	NM	NM	*	11.14	NM	NM	*
Fluoride	Grab	mg/L	-	Additional[(h)]	0.27	0.046	0.1	*	0.22	0.046	0.1	*
Heptachlor	Grab	µg/L	-	1/Discharge	ND	0.012	0.25	U *	ND	0.012	0.25	U *
Indeno(1,2,3-cd)pyrene	Grab	µg/L	-	1/Discharge	ND	0.13	0.2	U *	ND	0.13	0.2	U *
Lead	Grab	µg/L	-	1/Discharge	0.32	0.12	1	J (DNQ*)	ND	0.12	1	U *
Lead, dissolved	Grab	µg/L	-	Additional/Discharge	0.18	0.12	1	J (DNQ*)	ND	0.12	1	U *
Mercury	Grab	µg/L	-	1/Discharge	0.018	0.0002	0.0005	*	0.004	0.0002	0.0005	*
Mercury, dissolved	Grab	µg/L	-	Additional/Discharge	0.014	0.0002	0.0005	*	0.0035	0.0002	0.0005	*
Monomethyl hydrazine	Grab	µg/L	-	1/Discharge	ND	0.62	2	U *	ND	0.62	2	U *
Nitrate - N	Grab	mg/L	-	1/Discharge	0.041	0.02	0.1	J (DNQ*)	ND	0.02	0.1	U *
Nitrate + Nitrite as Nitrogen (N)	Grab	mg/L	-	1/Discharge	0.2	0.02	0.1	*	ND	0.02	0.1	U *
Nitrite - N	Grab	mg/L	-	1/Discharge	0.16	0.043	0.1	*	ND	0.043	0.1	U *
N-Nitrosodimethylamine	Grab	µg/L	-	1/Discharge	ND	0.18	0.2	U *	ND	0.18	0.2	U *
Oil & Grease	Grab	mg/L	-	1/Discharge	ND	0.5	0.98	U *	ND	0.5	0.98	U *
Pentachlorophenol	Grab	µg/L	-	1/Discharge	ND	0.83	0.98	U *	ND	0.83	0.98	U *
pH (Field)	Grab	s.u.	-	1/Discharge	8.38	NM	NM	*	8.18	NM	NM	*

TABLE C-2
SWTS 011 (INF-001) AND SWTS 018 (INF-002)
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

				LOCATION	**SWTS 011 (INF-001)**				**SWTS 018 (INF-002)**			
				DATE RANGE	**4/26/2024 10:30:00 AM**				**4/22/2024 11:20:00 AM**			
ANALYTE	**SAMPLE TYPE**	**UNITS**	**DAILY MAXIMUM LIMIT**	**SAMPLE FREQUENCY**	**RESULT**	**MDL**	**RL**	**LAB/ VALIDATION QUALIFIER**	**RESULT**	**MDL**	**RL**	**LAB/ VALIDATION QUALIFIER**
Selenium	Grab	µg/L	-	1/Discharge	0.87	0.52	2	J (DNQ*)	ND	0.52	2	U *
Selenium, dissolved	Grab	µg/L	-	Additional/Discharge	ND	0.52	2	U *	ND	0.52	2	U *
Sulfate	Grab	mg/L	-	1/Discharge	17	0.18	1	*	58	0.18	1	*
Temperature (Field)	Grab	Deg F	-	1/Discharge	60.8	NM	NM	*	60.3	NM	NM	*
Total Dissolved Solids	Grab	mg/L	-	1/Discharge	150	8.7	10	*	260	8.7	10	*
Total Suspended Solids	Grab	mg/L	-	Additional[(h)]	4.5	0.8	1	*	0.9	0.8	1	J (DNQ*)
Trichloroethene	Grab	µg/L	-	1/Discharge	ND	0.2	1	U *	ND	0.1	0.5	U *
Turbidity	Grab	NTU	-	1/Discharge	4.4	0.05	0.05	*	1.3	0.05	0.05	*
Zinc	Grab	µg/L	-	1/Discharge	7.2	2.8	20	J (DNQ*)	ND	2.8	20	U *
Zinc, dissolved	Grab	µg/L	-	Additional/Discharge	4.6	2.8	20	J (DNQ*)	ND	2.8	20	U *

TABLE C-3.A
RSW-002 (DOWNSTREAM)
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

				LOCATION	**RSW-002**			
				DATE RANGE	**4/14/2024 11:20:00 AM**			
ANALYTE	**SAMPLE TYPE**	**UNITS**	**DAILY MAXIMUM LIMIT**	**SAMPLE FREQUENCY**	**RESULT**	**MDL**	**RL**	**LAB/ VALIDATION QUALIFIER**
4,4'-DDD	Grab	µg/L	-	1/Quarter	ND	0.014	2.5	U *
4,4'-DDE	Grab	µg/L	-	1/Quarter	ND	0.009	0.25	U *
4,4'-DDT	Grab	µg/L	-	1/Quarter	ND	0.05	0.25	U *
Aroclor 1016	Grab	µg/L	-	1/Quarter	ND	2.5	5	U *
Aroclor 1221	Grab	µg/L	-	1/Quarter	ND	2.5	5	U *
Aroclor 1232	Grab	µg/L	-	1/Quarter	ND	2.5	5	U *
Aroclor 1242	Grab	µg/L	-	1/Quarter	ND	2.5	5	U *
Aroclor 1248	Grab	µg/L	-	1/Quarter	ND	2.5	5	U *
Aroclor 1254	Grab	µg/L	-	1/Quarter	ND	2.5	5	U *
Aroclor 1260	Grab	µg/L	-	1/Quarter	ND	2.5	5	U *
Chlordane	Grab	µg/L	-	1/Quarter	ND	0.22	2.5	U *
Chlorpyrifos	Grab	µg/L	0.014	1/Quarter	ND	0.004	0.01	U *
Diazinon	Grab	µg/L	0.010	1/Quarter	ND	0.0034	0.01	U *
Dieldrin	Grab	µg/L	-	1/Quarter	ND	0.0085	0.25	U *
Hardness	Grab	mg/L	-	1/Quarter	280	0.42	2	*
pH (Field)	Grab	s.u.	6.5-8.5	1/Quarter	7.89	NM	NM	*
Temperature (Field)	Grab	Deg F	80	1/Quarter	51.7	NM	NM	*
Toxaphene	Grab	µg/L	-	1/Quarter	ND	5	10	U *
Water Velocity	Grab	ft/sec	-	1/Quarter	0.3	NM	NM	*

TABLE C-3.B
RSW-003 (UPSTREAM)
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

				LOCATION	RSW-003			
				DATE RANGE	4/14/2024 10:45:00 AM			
ANALYTE	SAMPLE TYPE	UNITS	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER
Hardness	Grab	mg/L	-	1/Quarter	180	0.42	2	*
pH (Field)	Grab	s.u.	6.5-8.5	1/Quarter	8.08	NM	NM	*
Temperature (Field)	Grab	Deg F	80	1/Quarter	50.6	NM	NM	*
Water Velocity	Grab	ft/sec	-	1/Quarter	0.8	NM	NM	*

TABLE C-3.C
RSW-002 (DOWNSTREAM SEDIMENT)
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

			LOCATION	RSW-002			
			DATE RANGE	6/13/2024 07:20			
ANALYTE	UNITS	DAILY MAXIMUM LIMIT	SAMPLE FREQUENCY	RESULT	MDL	RL	LAB/ VALIDATION QUALIFIER
4,4'-DDD	µg/g	0.0020	1/Year	ND	0.00014	0.00099	U *
4,4'-DDE	µg/g	0.0014	1/Year	ND	0.00014	0.00099	U *
4,4'-DDT	µg/g	0.00030	1/Year	ND	0.00023	0.00099	U *
Ammonia[(c)]	mg/kg	-	1/Year	61.6	44.9	100	J (DNQ*)
Aroclor-1016 (PCB-1016)	µg/g	0.12	1/Year	ND	0.0078	0.0099	U *
Aroclor-1221 (PCB-1221)	µg/g	0.12	1/Year	ND	0.0078	0.0099	U *
Aroclor-1232 (PCB-1232)	µg/g	0.12	1/Year	ND	0.0078	0.0099	U *
Aroclor-1242 (PCB-1242)	µg/g	0.12	1/Year	ND	0.0078	0.0099	U *
Aroclor-1248 (PCB-1248)	µg/g	0.12	1/Year	ND	0.0078	0.0099	U *
Aroclor-1254 (PCB-1254)	µg/g	0.12	1/Year	ND	0.0050	0.0099	U *
Aroclor-1260 (PCB-1260)	µg/g	0.12	1/Year	ND	0.0050	0.0099	U *
Chlordane	µg/g	0.0033	1/Year	ND	0.00081	0.0050	U *
Bivalve Embryo Toxicity (Mytilus edulis)	% NOEC	-	1/Year	100	NM	NM	*
Sediment Toxicity (Eohaustorius estuarius)	% Survival	-	1/Year	100	NM	NM	*
Conductivity, Field	umhos/cm	-	1/Year	3,030	NM	NM	*
Dieldrin	µg/g	0.00020	1/Year	ND	0.00011	0.0002	U *
Dissolved Oxygen, Field	mg/L	-	1/Year	2.32	NM	NM	*
Flow Rate (Velocity)	ft/sec	-	1/Year	0	NM	NM	*
Percent Moisture	%	-	1/Year	19	0.1	0.1	*
pH, Field	s.u.	-	1/Year	7.86	NM	NM	*
Temperature, Field	Deg F	-	1/Year	69.2	NM	NM	*
Total Organic Carbon (TOC)[(d)]	mg/kg	-	1/Year	1100	900	4000	J (DNQ*)
Toxaphene	µg/g	0.00060	1/Year	ND	0.0030	0.0050	U *
Grain Size							
Clay (<0.00391 mm)[(p)]	%	-	1/Year	ND	0.01	0.01	U *
Coarse Sand (0.5 to 1mm), Wentworth[(p)]	%	-	1/Year	26.14	0.01	0.01	*
Fine Sand (0.125 to 0.25mm), Wentworth[(p)]	%	-	1/Year	0.11	0.01	0.01	*
Gravel (greater than 2mm), Wentworth[(p)]	%	-	1/Year	38.05	0.01	0.01	*
Medium Sand (0.25 to 0.5mm), Wentworth[(p)]	%	-	1/Year	2.77	0.01	0.01	*
SILT (0.00391 TO 0.0625mm)[(p)]	%	-	1/Year	ND	0.01	0.01	U *
TOTAL SILT AND CLAY (0 TO 0.0626mm)[(p)]	%	-	1/Year	ND	0.01	0.01	U *
VERY COARSE SAND (1 TO 2mm)[(p)]	%	-	1/Year	32.94	0.01	0.01	*
VERY FINE SAND (0.0625 TO 0.125 mm)[(p)]	%	-	1/Year	ND	0.01	0.01	U *

TABLE C-4
RADIONUCLIDES
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

		Chemical Name	Cesium-137, Total			Gross Alpha Analytes, Total			Gross Beta Analytes, Total			Gross Beta Analytes, Total			Potassium-40, Total		
		Units	pCi/L			pCi/L			pCi/L			millirem/yr			pCi/L		
		Daily Maximum	-			15			4 millirem/yr			4			-		
LOCATION NAME	SAMPLE DATE	SAMPLE FREQUENCY	RESULT	MDA	LAB/VALIDATION QUALIFIER	RESULT	MDA	LAB/VALIDATION QUALIFIER	RESULT	MDA	LAB/VALIDATION QUALIFIER	RESULT	MDA	LAB/VALIDATION QUALIFIER	RESULT	MDA	LAB/VALIDATION QUALIFIER
OF001	4/15/2024	1/Discharge	-0.942 ± 10.8	13.8	U *	1.49 ± 2.71	4.66	U *	2.92 ± 1.03	1.3	*	<4	NA	NA	-147 ± 173	213	U *
OF001	5/1/2024	1/Discharge	1.76 ± 14	18.8	U *	0.0849 ± 1.72	3.24	U *	1.73 ± 0.766	1.05	*	<4	NA	NA	1.56 ± 179	246	U *
OF002	4/15/2024	1/Discharge	-7.04 ± 17.6	22.5	U *	7.37 ± 4.46	6.08	*	4.67 ± 1.79	2.21	*	<4	NA	NA	-12.0 ± 177	246	U *
OF002	4/24/2024	1/Discharge	3.92 ± 9.14	11.3	U *	1.44 ± 2.31	3.98	U *	1.90 ± 1.06	1.51	*	<4	NA	NA	-19.1 ± 109	128	U *
OF008	4/15/2024	1/Discharge	-1.19 ± 8.82	11.3	U *	0.808 ± 1.15	1.93	U *	1.57 ± 0.635	0.817	*	<4	NA	NA	28.6 ± 133	153	U *
OF009	4/15/2024	1/Discharge	-3.40 ± 10.1	12.5	U *	3.03 ± 1.91	2.7	*	3.95 ± 0.959	0.95	*	<4	NA	NA	45.3 ± 112	128	U *
OF011	5/1/2024	1/Discharge	-3.06 ± 10.9	13.5	U *	1.86 ± 1.78	2.8	U *	1.84 ± 0.879	1.23	*	<4	NA	NA	45.8 ± 83.6	96.4	U *
OF018	4/24/2024	1/Discharge	-3.96 ± 12.2	15	U *	-0.188 ± 1.32	2.81	U *	1.88 ± 0.944	1.34	*	<4	NA	NA	-59.4 ± 165	213	U *
SWTS 011 (INF-001)	4/26/2024	1/Discharge	-1.70 ± 14.5	18	U *	0.908 ± 1.3	2.19	U *	1.50 ± 0.67	0.91	*	<4	NA	NA	-19.5 ± 169	213	U *
SWTS 018 (INF-002)	4/22/2024	1/Discharge	-3.52 ± 14.2	18.8	U *	1.83 ± 2.08	3.38	U *	1.94 ± 0.929	1.3	*	<4	NA	NA	-103 ± 186	295	U *

TABLE C-4
RADIONUCLIDES
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

		Chemical Name	Radium-226 & 228			Strontium-90, Total			Total Uranium			Tritium, Total		
		Units	pCi/L			pCi/L			pCi/L			pCi/L		
		Daily Maximum	5			8			20			20,000		
LOCATION NAME	SAMPLE DATE	SAMPLE FREQUENCY	RESULT	MDA	LAB/VALIDATION QUALIFIER	RESULT	MDA	LAB/VALIDATION QUALIFIER	RESULT	MDA	LAB/VALIDATION QUALIFIER	RESULT	MDA	LAB/VALIDATION QUALIFIER
OF001	4/15/2024	1/Discharge	0.361 ± 0.361	NM	*	0.655 ± 0.315	0.446	*	0.846 ± 0.426	0.3	*	-57.7 ± 129	251	U *
OF001	5/1/2024	1/Discharge	0.818 ± 0.558	NM	U *	0.188 ± 0.232	0.382	U *	0.755 ± 0.275	0.14	*	170 ± 145	225	U *
OF002	4/15/2024	1/Discharge	0.416 ± 0.698	NM	*	0.252 ± 0.302	0.498	U *	2.56 ± 0.7	0.284	*	-2.70 ± 136	251	U *
OF002	4/24/2024	1/Discharge	0.57 ± 0.366	NM	U *	0.112 ± 0.179	0.303	U *	0.902 ± 0.305	0.163	*	49.5 ± 128	219	U *
OF008	4/15/2024	1/Discharge	0.947 ± 0.619	NM	*	0.136 ± 0.276	0.475	U *	0.486 ± 0.33	0.333	*	122 ± 150	248	U *
OF009	4/15/2024	1/Discharge	0.703 ± 0.471	NM	U *	0.351 ± 0.376	0.613	U *	1.24 ± 0.497	0.246	*	-50.0 ± 129	249	U *
OF011	5/1/2024	1/Discharge	0.588 ± 0.4	NM	U *	0.0613 ± 0.243	0.425	U *	0.423 ± 0.222	0.16	*	145 ± 143	230	U *
OF018	4/24/2024	1/Discharge	0.585 ± 0.293	NM	U *	0.491 ± 0.312	0.47	*	0.585 ± 0.237	0.132	*	114 ± 140	230	U *
SWTS 011 (INF-001)	4/26/2024	1/Discharge	0.923 ± 0.588	NM	U *	0.0843 ± 0.272	0.475	U *	0.514 ± 0.329	0.273	*	51.4 ± 136	238	U *
SWTS 018 (INF-002)	4/22/2024	1/Discharge	0.7 ± 0.424	NM	U *	0.108 ± 0.209	0.359	U *	2.46 ± 0.493	0.167	*	108 ± 137	229	U *

TABLE C-5
TCDD TEQ
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					LOCATION ID	Outfall 001					Outfall 001					Outfall 002				
					SAMPLE DATE	04/14/2024 08:30 - 04/15/2024 07:45					04/30/2024 09:50 - 05/01/2024 09:50					04/14/2024 08:50 - 04/15/2024 08:50				
ANALYTE	ML	OUTFALL SAMPLE FREQUENCY	1998 WHO TEF	BEF GREAT LAKES WATER QUALITY INITIATIVE	UNITS	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)
1,2,3,4,6,7,8-HpCDD	5.00E-05	1/Discharge	0.01	0.05	µg/L	1.90E-06	5.10E-05	0.000019	J (DNQ)	ND	4.00E-07	5.10E-05	ND	U (B)	ND	9.50E-07	5.10E-05	0.000013	J (DNQ)	ND
1,2,3,4,6,7,8-HpCDF	5.00E-05	1/Discharge	0.01	0.01	µg/L	1.20E-06	5.10E-05	0.0000093	UJ (*10)	ND	9.90E-07	5.10E-05	ND	U (B)	ND	1.20E-06	5.10E-05	ND	U	ND
1,2,3,4,7,8,9-HpCDF	5.00E-05	1/Discharge	0.01	0.4	µg/L	1.40E-06	5.10E-05	ND	U	ND	1.10E-06	5.10E-05	ND	U (B)	ND	1.40E-06	5.10E-05	ND	U	ND
1,2,3,4,7,8-HxCDD	5.00E-05	1/Discharge	0.1	0.3	µg/L	2.30E-06	5.10E-05	ND	U	ND	1.10E-06	5.10E-05	ND	U (B)	ND	1.70E-06	5.10E-05	ND	U	ND
1,2,3,4,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.08	µg/L	1.90E-06	5.10E-05	ND	U	ND	6.60E-07	5.10E-05	ND	U	ND	1.20E-06	5.10E-05	ND	U	ND
1,2,3,6,7,8-HxCDD	5.00E-05	1/Discharge	0.1	0.1	µg/L	2.30E-06	5.10E-05	ND	U	ND	1.20E-06	5.10E-05	ND	U	ND	1.80E-06	5.10E-05	ND	U	ND
1,2,3,6,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.2	µg/L	1.90E-06	5.10E-05	ND	U	ND	6.50E-07	5.10E-05	ND	U	ND	1.20E-06	5.10E-05	0.0000015	J (DNQ)	ND
1,2,3,7,8,9-HxCDD	5.00E-05	1/Discharge	0.1	0.1	µg/L	2.20E-06	5.10E-05	ND	U	ND	1.10E-06	5.10E-05	ND	U	ND	1.70E-06	5.10E-05	ND	U	ND
1,2,3,7,8,9-HxCDF	5.00E-05	1/Discharge	0.1	0.6	µg/L	2.10E-06	5.10E-05	ND	U	ND	6.10E-07	5.10E-05	ND	U (B)	ND	1.20E-06	5.10E-05	ND	U	ND
1,2,3,7,8-PeCDF	5.00E-05	1/Discharge	0.05	0.2	µg/L	2.40E-06	5.10E-05	ND	U	ND	8.60E-07	5.10E-05	ND	U	ND	1.70E-06	5.10E-05	ND	U	ND
1,2,3,7,8-PeCDD	5.00E-05	1/Discharge	1	0.9	µg/L	2.20E-06	5.10E-05	ND	U	ND	1.40E-06	5.10E-05	ND	U	ND	1.00E-06	5.10E-05	ND	U	ND
2,3,4,6,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.7	µg/L	1.60E-06	5.10E-05	ND	U	ND	6.10E-07	5.10E-05	ND	U (B)	ND	9.80E-07	5.10E-05	ND	U	ND
2,3,4,7,8-PeCDF	5.00E-05	1/Discharge	0.5	1.6	µg/L	2.80E-06	5.10E-05	ND	U	ND	9.10E-07	5.10E-05	ND	U	ND	1.80E-06	5.10E-05	ND	U	ND
2,3,7,8-TCDD	0.00001	1/Discharge	1	1	µg/L	3.60E-06	1.00E-05	ND	U	ND	2.50E-07	1.00E-05	ND	U	ND	1.80E-06	1.00E-05	ND	U	ND
2,3,7,8-TCDF	0.00001	1/Discharge	0.1	0.8	µg/L	5.50E-06	1.00E-05	ND	U	ND	1.60E-07	1.00E-05	ND	U	ND	1.60E-06	1.00E-05	ND	U	ND
OCDD	0.0001	1/Discharge	0.0001	0.01	µg/L	2.80E-06	0.0001	0.00013	--	1.3E-10	1.10E-06	0.0001	ND	U (B)	ND	2.00E-06	0.0001	0.00015	--	1.5E-10
OCDF	0.0001	1/Discharge	0.0001	0.02	µg/L	2.00E-06	0.0001	0.000013	J (DNQ)	ND	6.10E-07	0.0001	ND	U (B)	ND	1.60E-06	0.0001	0.000014	J (DNQ)	ND
						TCDD TEQ w/out DNQ Values				1.3E-10	TCDD TEQ w/out DNQ Values				ND	TCDD TEQ w/out DNQ Values				1.5E-10
						TCDD TEQ w/out DNQ Values in lbs/day				2.20E-13	TCDD TEQ w/out DNQ Values in lbs/day				ND	TCDD TEQ w/out DNQ Values in lbs/day				5.70E-13
						TCDD TEQ Limit				2.8E-08	TCDD TEQ Limit				2.8E-08	TCDD TEQ Limit				2.8E-08
						TCDD TEQ Limit in lbs/day				1.75E-08	TCDD TEQ Limit in lbs/day				1.75E-08	TCDD TEQ Limit in lbs/day				1.75E-08

TABLE C-5
TCDD TEQ
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

						LOCATION ID	Outfall 002					Outfall 008[(j)]					Outfall 009[(j)]				
						SAMPLE DATE	04/23/2024 11:30 - 04/24/2024 11:10					04/14/2024 08:10 - 04/15/2024 08:15					04/14/2024 09:15 - 04/15/2024 09:40				
ANALYTE	ML	OUTFALL SAMPLE FREQUENCY	1998 WHO TEF	BEF GREAT LAKES WATER QUALITY INITIATIVE	UNITS		LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)
1,2,3,4,6,7,8-HpCDD	5.00E-05	1/Discharge	0.01	0.05	µg/L		3.20E-06	4.90E-05	0.000014	UJ (*10)	ND	1.80E-06	5.10E-05	ND	U	ND	2.40E-06	5.00E-05	0.000018	J (DNQ)	ND
1,2,3,4,6,7,8-HpCDF	5.00E-05	1/Discharge	0.01	0.01	µg/L		3.00E-06	4.90E-05	0.0000056	UJ (*10)	ND	5.20E-06	5.10E-05	ND	U	ND	1.50E-06	5.00E-05	0.0000067	UJ (*10)	ND
1,2,3,4,7,8,9-HpCDF	5.00E-05	1/Discharge	0.01	0.4	µg/L		3.30E-06	4.90E-05	ND	U	ND	5.30E-06	5.10E-05	ND	U	ND	1.50E-06	5.00E-05	0.0000045	UJ (*10)	ND
1,2,3,4,7,8-HxCDD	5.00E-05	1/Discharge	0.1	0.3	µg/L		4.10E-06	4.90E-05	ND	U	ND	4.40E-06	5.10E-05	ND	U	ND	1.90E-06	5.00E-05	0.000004	J (DNQ)	ND
1,2,3,4,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.08	µg/L		3.30E-06	4.90E-05	ND	U	ND	6.00E-06	5.10E-05	ND	U	ND	1.60E-06	5.00E-05	0.0000039	UJ (*10)	ND
1,2,3,6,7,8-HxCDD	5.00E-05	1/Discharge	0.1	0.1	µg/L		4.50E-06	4.90E-05	ND	U	ND	4.70E-06	5.10E-05	ND	U	ND	2.10E-06	5.00E-05	0.0000063	J (DNQ)	ND
1,2,3,6,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.2	µg/L		3.50E-06	4.90E-05	ND	U	ND	5.50E-06	5.10E-05	ND	U	ND	1.80E-06	5.00E-05	0.0000037	UJ (*10)	ND
1,2,3,7,8,9-HxCDD	5.00E-05	1/Discharge	0.1	0.1	µg/L		4.10E-06	4.90E-05	ND	U	ND	4.40E-06	5.10E-05	ND	U	ND	1.90E-06	5.00E-05	0.000005	J (DNQ)	ND
1,2,3,7,8,9-HxCDF	5.00E-05	1/Discharge	0.1	0.6	µg/L		3.70E-06	4.90E-05	ND	U	ND	4.30E-06	5.10E-05	ND	U	ND	1.80E-06	5.00E-05	0.0000032	J (DNQ)	ND
1,2,3,7,8-PeCDF	5.00E-05	1/Discharge	0.05	0.2	µg/L		3.50E-06	4.90E-05	ND	U	ND	5.60E-06	5.10E-05	ND	U	ND	1.50E-06	5.00E-05	0.0000032	UJ (*10)	ND
1,2,3,7,8-PeCDD	5.00E-05	1/Discharge	1	0.9	µg/L		2.50E-06	4.90E-05	ND	U	ND	4.40E-06	5.10E-05	ND	U	ND	1.30E-06	5.00E-05	0.0000037	J (DNQ)	ND
2,3,4,6,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.7	µg/L		2.90E-06	4.90E-05	ND	U	ND	3.90E-06	5.10E-05	ND	U	ND	1.50E-06	5.00E-05	0.0000033	UJ (*10)	ND
2,3,4,7,8-PeCDF	5.00E-05	1/Discharge	0.5	1.6	µg/L		3.40E-06	4.90E-05	ND	U	ND	4.20E-06	5.10E-05	ND	U	ND	1.50E-06	5.00E-05	0.0000021	UJ (*10)	ND
2,3,7,8-TCDD	0.00001	1/Discharge	1	1	µg/L		3.60E-06	9.90E-06	ND	U	ND	4.00E-06	1.00E-05	ND	U	ND	1.60E-06	1.00E-05	ND	U	ND
2,3,7,8-TCDF	0.00001	1/Discharge	0.1	0.8	µg/L		3.80E-06	9.90E-06	ND	U	ND	4.60E-06	1.00E-05	ND	U	ND	1.70E-06	1.00E-05	ND	U	ND
OCDD	0.0001	1/Discharge	0.0001	0.01	µg/L		7.00E-06	0.000099	ND	U (B)	ND	6.00E-06	0.0001	ND	U	ND	2.70E-06	0.0001	0.00021	--	2.1E-10
OCDF	0.0001	1/Discharge	0.0001	0.02	µg/L		5.80E-06	0.000099	0.000011	J (DNQ)	ND	4.10E-06	0.0001	ND	U	ND	1.80E-06	0.0001	0.000017	J (DNQ)	ND
							TCDD TEQ w/out DNQ Values				ND	TCDD TEQ w/out DNQ Values				ND	TCDD TEQ w/out DNQ Values				2.1E-10
							TCDD TEQ w/out DNQ Values in lbs/day				ND	TCDD TEQ w/out DNQ Values in lbs/day				ND	TCDD TEQ w/out DNQ Values in lbs/day				4.10E-13
							TCDD TEQ Limit				2.8E-08	TCDD TEQ Limit				2.8E-08	TCDD TEQ Limit				2.8E-08
							TCDD TEQ Limit in lbs/day				1.75E-08	TCDD TEQ Limit in lbs/day				1.7E-09	TCDD TEQ Limit in lbs/day				1.5E-08

TABLE C-5
TCDD TEQ
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					LOCATION ID	Outfall 011					Outfall 018					SWTS 011 (INF-001)				
					SAMPLE DATE	04/30/2024 09:05 - 05/01/2024 08:50					04/23/2024 10:35 - 04/24/2024 10:40					4/26/2024 10:30:00 AM				
ANALYTE	ML	OUTFALL SAMPLE FREQUENCY	1998 WHO TEF	BEF GREAT LAKES WATER QUALITY INITIATIVE	UNITS	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)
1,2,3,4,6,7,8-HpCDD	5.00E-05	1/Discharge	0.01	0.05	µg/L	3.40E-07	5.10E-05	ND	U (B)	ND	1.40E-06	5.00E-05	ND	U	ND	1.10E-06	5.00E-05	ND	U (B)	ND
1,2,3,4,6,7,8-HpCDF	5.00E-05	1/Discharge	0.01	0.01	µg/L	6.80E-07	5.10E-05	ND	U (B)	ND	8.60E-07	5.00E-05	ND	U	ND	4.80E-07	5.00E-05	0.0000044	J (DNQ)	ND
1,2,3,4,7,8,9-HpCDF	5.00E-05	1/Discharge	0.01	0.4	µg/L	7.20E-07	5.10E-05	ND	U	ND	8.80E-07	5.00E-05	ND	U	ND	5.10E-07	5.00E-05	ND	U	ND
1,2,3,4,7,8-HxCDD	5.00E-05	1/Discharge	0.1	0.3	µg/L	1.10E-06	5.10E-05	ND	U (B)	ND	2.00E-06	5.00E-05	ND	U	ND	8.70E-07	5.00E-05	ND	U	ND
1,2,3,4,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.08	µg/L	6.10E-07	5.10E-05	ND	U	ND	1.40E-06	5.00E-05	ND	U	ND	7.50E-07	5.00E-05	ND	U	ND
1,2,3,6,7,8-HxCDD	5.00E-05	1/Discharge	0.1	0.1	µg/L	1.10E-06	5.10E-05	ND	U	ND	2.10E-06	5.00E-05	ND	U	ND	8.30E-07	5.00E-05	ND	U	ND
1,2,3,6,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.2	µg/L	5.90E-07	5.10E-05	ND	U	ND	1.50E-06	5.00E-05	ND	U	ND	7.30E-07	5.00E-05	ND	U	ND
1,2,3,7,8,9-HxCDD	5.00E-05	1/Discharge	0.1	0.1	µg/L	1.00E-06	5.10E-05	ND	U	ND	2.00E-06	5.00E-05	ND	U	ND	8.00E-07	5.00E-05	ND	U	ND
1,2,3,7,8,9-HxCDF	5.00E-05	1/Discharge	0.1	0.6	µg/L	5.70E-07	5.10E-05	ND	U (B)	ND	1.70E-06	5.00E-05	ND	U	ND	6.80E-07	5.00E-05	ND	U	ND
1,2,3,7,8-PeCDF	5.00E-05	1/Discharge	0.05	0.2	µg/L	8.40E-07	5.10E-05	ND	U	ND	2.00E-06	5.00E-05	ND	U	ND	7.10E-07	5.00E-05	ND	U	ND
1,2,3,7,8-PeCDD	5.00E-05	1/Discharge	1	0.9	µg/L	1.40E-06	5.10E-05	ND	U	ND	1.70E-06	5.00E-05	ND	U	ND	6.40E-07	5.00E-05	ND	U	ND
2,3,4,6,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.7	µg/L	5.50E-07	5.10E-05	ND	U	ND	1.30E-06	5.00E-05	ND	U	ND	6.00E-07	5.00E-05	ND	U	ND
2,3,4,7,8-PeCDF	5.00E-05	1/Discharge	0.5	1.6	µg/L	9.80E-07	5.10E-05	ND	U	ND	2.10E-06	5.00E-05	ND	U	ND	8.50E-07	5.00E-05	ND	U	ND
2,3,7,8-TCDD	0.00001	1/Discharge	1	1	µg/L	2.60E-07	1.00E-05	ND	U	ND	2.90E-06	9.90E-06	ND	U	ND	8.50E-07	1.00E-05	ND	U	ND
2,3,7,8-TCDF	0.00001	1/Discharge	0.1	0.8	µg/L	1.90E-07	1.00E-05	ND	U	ND	3.50E-06	9.90E-06	ND	U	ND	8.50E-07	1.00E-05	ND	U	ND
OCDD	0.0001	1/Discharge	0.0001	0.01	µg/L	1.10E-06	0.0001	ND	U (B)	ND	2.50E-06	0.000099	ND	U (B)	ND	1.00E-06	0.0001	ND	U (B)	ND
OCDF	0.0001	1/Discharge	0.0001	0.02	µg/L	6.50E-07	0.0001	ND	U (B)	ND	2.30E-06	0.000099	ND	U	ND	6.70E-07	0.0001	ND	U (B)	ND
						TCDD TEQ w/out DNQ Values				ND	TCDD TEQ w/out DNQ Values				ND	TCDD TEQ w/out DNQ Values				ND
						TCDD TEQ w/out DNQ Values in lbs/day				ND	TCDD TEQ w/out DNQ Values in lbs/day				ND					
						TCDD TEQ Limit				2.8E-08	TCDD TEQ Limit				2.8E-08					
						TCDD TEQ Limit in lbs/day				1.75E-08	TCDD TEQ Limit in lbs/day				1.75E-08					

TABLE C-5
TCDD TEQ
SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					LOCATION ID	SWTS 018 (INF-002)				
					SAMPLE DATE	4/22/2024 11:20:00 AM				
ANALYTE	ML	OUTFALL SAMPLE FREQUENCY	1998 WHO TEF	BEF GREAT LAKES WATER QUALITY INITIATIVE	UNITS	LAB MDL	LAB RL	LAB RESULT	LAB/ VALIDATION QUALIFIER	TCDD EQUIVALENT (w/out DNQ Values)
1,2,3,4,6,7,8-HpCDD	5.00E-05	1/Discharge	0.01	0.05	µg/L	3.70E-07	5.10E-05	ND	U (B)	ND
1,2,3,4,6,7,8-HpCDF	5.00E-05	1/Discharge	0.01	0.01	µg/L	3.70E-07	5.10E-05	ND	U (B)	ND
1,2,3,4,7,8,9-HpCDF	5.00E-05	1/Discharge	0.01	0.4	µg/L	3.40E-07	5.10E-05	ND	U (B)	ND
1,2,3,4,7,8-HxCDD	5.00E-05	1/Discharge	0.1	0.3	µg/L	1.80E-07	5.10E-05	ND	U (B)	ND
1,2,3,4,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.08	µg/L	1.50E-07	5.10E-05	ND	U	ND
1,2,3,6,7,8-HxCDD	5.00E-05	1/Discharge	0.1	0.1	µg/L	2.20E-07	5.10E-05	ND	U	ND
1,2,3,6,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.2	µg/L	1.70E-07	5.10E-05	ND	U	ND
1,2,3,7,8,9-HxCDD	5.00E-05	1/Discharge	0.1	0.1	µg/L	1.90E-07	5.10E-05	ND	U	ND
1,2,3,7,8,9-HxCDF	5.00E-05	1/Discharge	0.1	0.6	µg/L	1.40E-07	5.10E-05	ND	U (B)	ND
1,2,3,7,8-PeCDF	5.00E-05	1/Discharge	0.05	0.2	µg/L	4.80E-07	5.10E-05	ND	U	ND
1,2,3,7,8-PeCDD	5.00E-05	1/Discharge	1	0.9	µg/L	1.40E-06	5.10E-05	ND	U	ND
2,3,4,6,7,8-HxCDF	5.00E-05	1/Discharge	0.1	0.7	µg/L	1.40E-07	5.10E-05	ND	U	ND
2,3,4,7,8-PeCDF	5.00E-05	1/Discharge	0.5	1.6	µg/L	4.60E-07	5.10E-05	ND	U	ND
2,3,7,8-TCDD	0.00001	1/Discharge	1	1	µg/L	3.60E-07	1.00E-05	ND	U	ND
2,3,7,8-TCDF	0.00001	1/Discharge	0.1	0.8	µg/L	3.50E-08	1.00E-05	ND	U	ND
OCDD	0.0001	1/Discharge	0.0001	0.01	µg/L	4.50E-07	0.0001	ND	U (B)	ND
OCDF	0.0001	1/Discharge	0.0001	0.02	µg/L	2.60E-07	0.0001	ND	U (B)	ND
						TCDD TEQ w/out DNQ Values				ND

APPENDIX D

NPDES Permit Limit Exceedances, and/or Non-Compliance, Second Quarter 2024

TABLE D
SUMMARY OF PERMIT LIMIT EXCEEDANCES AND/OR NON-COMPLIANCE

SECOND QUARTER 2024
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

Daily Maximum Permit Limit Exceedances and/or Non-Compliance							
Outfall	**Sample Date**	**Sample Type**	**Analyte**	**Permit Limit Daily Max**	**Result**	**Units**	**Laboratory/ Validation Qualifier**
OUTFALL 001	04/15/2024	Comp	Aluminum	1.0	1.4	mg/L	--
OUTFALL 002	04/15/2024	Comp	Aluminum	1.0	1.4	mg/L	--
OUTFALL 002	04/15/2024	Comp	Sulfate	300	310	mg/L	--
OUTFALL 009	04/15/2024	Comp	Aluminum	1.0	2.3	mg/L	--
OUTFALL 009	04/15/2024	Comp	Lead	5.2	14	ug/L	--

APPENDIX E

Toxicity Laboratory Reports and Validation Reports, Second Quarter 2024

APPENDIX E

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eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Katherine Miller
Haley & Aldrich, Inc.
400 E Van Buren St.
Suite 545
Phoenix, Arizona 85004

Generated 7/26/2024 2:57:21 PM

JOB DESCRIPTION

Boeing NPDES SSFL - Annual Sediment RSW-002
Arroyo Seimi-Downstream

JOB NUMBER

570-188335-3

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin CA 92780

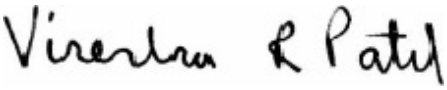
See page two for job notes and contact information.

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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7/26/2024 2:57:21 PM

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

Table of Contents

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Boeing NPDES SSFL - Annual Sediment
RSW-002

Job ID: 570-188335-3
SDG: Arroyo Seimi-Downstream

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

Job Narrative
570-188335-3

Receipt
The sample was received on 6/14/2024 6:20 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 2.8º 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.

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Boeing NPDES SSFL - Annual Sediment
RSW-002

Job ID: 570-188335-3
SDG: Arroyo Seimi-Downstream

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-188335-1	RSW-002_Sed_20230613	Solid	06/13/24 07:20	06/14/24 18:20

AQUATIC BIOASSAY
& CONSULTING LABORATORIES, INC.

July 26, 2024

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_20240613
DATE RECEIVED:	6/13/2024
ABC LAB. NO.:	CSE0624/184

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

Percent Survival = 100.00% Survival

Yours very truly,

Scott Johnson
Laboratory Director

CETIS Summary Report

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

Batch ID:	01-9912-8023	**Test Type:**	Survival-Reburial	**Analyst:**	
Start Date:	18 Jun-24 13:01	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Laboratory Seawater
Ending Date:	28 Jun-21 13:11	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Test Length:	---	**Taxon:**	Malacostraca	**Source:**	Northwestern Aquatic Scien **Age:**
Sample ID:	16-3260-6886	**Code:**	EUR0624.184	**Project:**	Boeing SSFL NPDES
Sample Date:	13 Jun-24 07:20	**Material:**	Sediment	**Source:**	Bioassay Report
Receipt Date:	13 Jun-24 14:00	**CAS (PC):**		**Station:**	RSW-002_Sed_20240613
Sample Age:	5d 6h	**Client:**	Eurofins Calscience		

SIngle Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result	S
08-2494-7001	Survival Rate	Wilcoxon Rank Sum Two-Sample Test	1.0000	100% passed survival rate	1

Test Acceptability

				TAC Limits			
Analysis ID	**Endpoint**	**Attribute**	**Test Stat**	**Lower**	**Upper**	**Overlap**	**Decision**
08-2494-7001	Survival Rate	Control Resp	1	0.9	<<	Yes	Passes Criteria

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

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

Analysis ID:	08-2494-7001	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:31	**Analysis:**	Nonparametric-Two Sample	**Status Level:**	1
Edit Date:	26 Jul-24 12:31	**MD5 Hash:**	D2BA4081DAD0A69D634823731B2DEACB	**Editor ID:**	001-083-753-2
Batch ID:	01-9912-8023	**Test Type:**	Survival-Reburial	**Analyst:**	
Start Date:	18 Jun-24 13:01	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Laboratory Seawater
Ending Date:	28 Jun-21 13:11	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Test Length:	---	**Taxon:**	Malacostraca	**Source:**	Northwestern Aquatic Scien **Age:**
Sample ID:	16-3260-6886	**Code:**	EUR0624.184	**Project:**	Boeing SSFL NPDES
Sample Date:	13 Jun-24 07:20	**Material:**	Sediment	**Source:**	Bioassay Report
Receipt Date:	13 Jun-24 14:00	**CAS (PC):**		**Station:**	RSW-002_Sed_20240613
Sample Age:	5d 6h	**Client:**	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

Test Acceptability Criteria

		TAC Limits			
Attribute	**Test Stat**	**Lower**	**Upper**	**Overlap**	**Decision**
Control Resp	1	0.9	<<	Yes	Passes Criteria

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

Survival Rate Summary

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

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	1.4590	1.4580	1.4590	1.4590	1.4590	1.4590	0.0000	0.00%	0.00%
100		5	1.4590	1.4580	1.4590	1.4590	1.4590	1.4590	0.0000	0.00%	0.00%

Survival Rate Detail

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

Angular (Corrected) Transformed Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.4590	1.4590	1.4590	1.4590	1.4590
100		1.4590	1.4590	1.4590	1.4590	1.4590

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

Analysis ID:	08-2494-7001	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:31	**Analysis:**	Nonparametric-Two Sample	**Status Level:**	1
Edit Date:	26 Jul-24 12:31	**MD5 Hash:**	D2BA4081DAD0A69D634823731B2DEACB	**Editor ID:**	001-083-753-2

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

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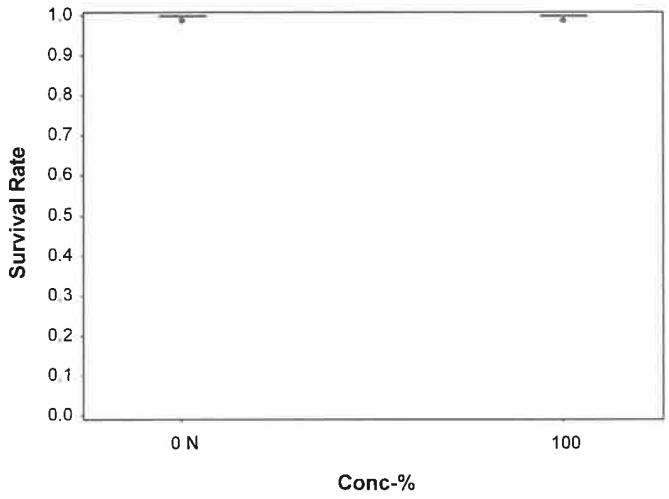
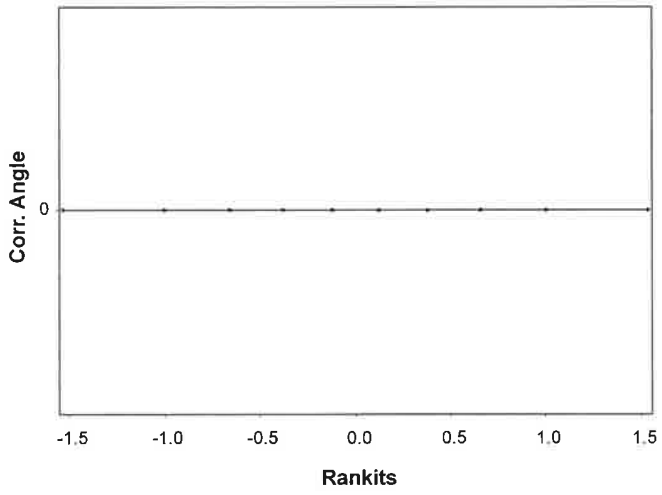




CETIS Measurement Report

Report Date: 26 Jul-24 12:54 (p 1 of 1)
Test Code/ID: EUR0624.184 / 04-2079-5477

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

Batch ID:	01-9912-8023	**Test Type:**	Survival-Reburial	**Analyst:**	
Start Date:	18 Jun-24 13:01	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Laboratory Seawater
Ending Date:	28 Jun-21 13:11	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Test Length:	---	**Taxon:**	Malacostraca	**Source:**	Northwestern Aquatic Scien **Age:**
Sample ID:	16-3260-6886	**Code:**	EUR0624.184	**Project:**	Boeing SSFL NPDES
Sample Date:	13 Jun-24 07:20	**Material:**	Sediment	**Source:**	Bioassay Report
Receipt Date:	13 Jun-24 14:00	**CAS (PC):**		**Station:**	RSW-002_Sed_20240613
Sample Age:	5d 6h	**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	10.05	9.415	10.69	10	10.1	0.03536	0.07073	0.70%	0
100		2	10	8.729	11.27	9.9	10.1	0.07072	0.1414	1.41%	0
Overall		4	10.03	9.873	10.18	9.9	10.1	0.04787	0.09574	0.96%	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	7.7	7.698	7.702	7.7	7.7	0	0	0.00%	0
Overall		4	7.8	7.616	7.984	7.7	7.9	0.05774	0.1155	1.48%	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%)

AQUATIC BIOASSAY
& CONSULTING LABORATORIES, INC.

July 26, 2024

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_20240613
DATE RECEIVED:	6/13/2024
ABC LAB. NO.:	EUR0624.184

CHRONIC MYTILUS SEDIMENT WATER INTERFACE BIOASSAY

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

Yours very truly,

Scott Johnson
Laboratory Director

CETIS Summary Report

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	20-2602-4058	**Test Type:**	Development-Survival	**Analyst:**			
Start Date:	18 Jun-24 13:15	**Protocol:**	EPA/600/R-95/136 (1995)	**Diluent:**	Laboratory Water		
Ending Date:	20 Jun-24 13:15	**Species:**	Mytilus galloprovincialis	**Brine:**			
Test Length:	48h	**Taxon:**	Bivalvia	**Source:**	Carlsbad Aquafarms CA	**Age:**	
Sample ID:	20-9214-6826	**Code:**	EUR0624.184	**Project:**	Boeing SSFL NPDES		
Sample Date:	13 Jun-24 07:20	**Material:**	Sample Water	**Source:**	Bioassay Report		
Receipt Date:	13 Jun-24 14:00	**CAS (PC):**		**Station:**	RSW-002_Sed_20240613		
Sample Age:	5d 6h	**Client:**	Eurofins Calscience				

SIngle Comparison Summary

Analysis ID	Endpoint	Comparison Method	P-Value	Comparison Result	S
09-2050-9456	Combined Proportion Norma	Equal Variance t Two-Sample Test	0.5011	100% passed combined proportion normal	1

Test Acceptability

				TAC Limits			
Analysis ID	**Endpoint**	**Attribute**	**Test Stat**	**Lower**	**Upper**	**Overlap**	**Decision**
09-2050-9456	Combined Proportion Norma	PMSD	0.01898	<<	0.25	No	Passes Criteria

Combined Proportion Normal Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	N	5	0.9705	0.9462	0.9949	0.9420	0.9955	0.0088	0.0196	2.02%	0.00%
100		5	0.9732	0.9628	0.9836	0.9643	0.9821	0.0037	0.0084	0.86%	-0.28%

Combined Proportion Normal Detail — MD5: EF3FDCA3FA08332687C48EB1865A6A55

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9420	0.9777	0.9643	0.9955	0.9732
100		0.9643	0.9777	0.9821	0.9643	0.9777

Combined Proportion Normal Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	211/224	219/224	216/224	223/224	218/224
100		216/224	219/224	220/224	216/224	219/224

CETIS Analytical Report

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	09-2050-9456	**Endpoint:**	Combined Proportion Normal	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:52	**Analysis:**	Parametric-Two Sample	**Status Level:**	1
Edit Date:	26 Jul-24 12:51	**MD5 Hash:**	EF3FDCA3FA08332687C48EB1865A6A55	**Editor ID:**	001-083-753-2
Batch ID:	20-2602-4058	**Test Type:**	Development-Survival	**Analyst:**	
Start Date:	18 Jun-24 13:15	**Protocol:**	EPA/600/R-95/136 (1995)	**Diluent:**	Laboratory Water
Ending Date:	20 Jun-24 13:15	**Species:**	Mytilus galloprovincialis	**Brine:**	
Test Length:	48h	**Taxon:**	Bivalvia	**Source:**	Carlsbad Aquafarms CA **Age:**
Sample ID:	20-9214-6826	**Code:**	EUR0624.184	**Project:**	Boeing SSFL NPDES
Sample Date:	13 Jun-24 07:20	**Material:**	Sample Water	**Source:**	Bioassay Report
Receipt Date:	13 Jun-24 14:00	**CAS (PC):**		**Station:**	RSW-002_Sed_20240613
Sample Age:	5d 6h	**Client:**	Eurofins Calscience		

Data Transform	Alt Hyp	Comparison Result	PMSD
Angular (Corrected)	C > T	100% passed combined proportion normal endpoint	1.90%

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	-0.00287	1.86	0.05769	CDF	0.5011	Non-Significant Effect

Test Acceptability Criteria

		TAC Limits			
Attribute	**Test Stat**	**Lower**	**Upper**	**Overlap**	**Decision**
PMSD	0.01898	<<	0.25	No	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	1.982E-08	1.982E-08	1	8.237E-06	0.9978	Non-Significant Effect
Error	0.019248	0.002406	8			
Total	0.019248		9			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Levene Equality of Variance Test	1.291	11.26	0.2888	Equal Variances
	Mod Levene Equality of Variance Test	1.797	13.75	0.2286	Equal Variances
	Variance Ratio F Test	6.262	23.15	0.1033	Equal Variances
Distribution	Anderson-Darling A2 Test	0.4916	3.878	0.2228	Normal Distribution
	D'Agostino Skewness Test	0.7102	2.576	0.4776	Normal Distribution
	Kolmogorov-Smirnov D Test	0.1896	0.3025	0.4331	Normal Distribution
	Shapiro-Wilk W Normality Test	0.9301	0.7411	0.4487	Normal Distribution

Combined Proportion Normal Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	0.9705	0.9462	0.9949	0.9732	0.9420	0.9955	0.0088	2.02%	0.00%
100		5	0.9732	0.9628	0.9836	0.9777	0.9643	0.9821	0.0037	0.86%	-0.28%

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	1.4080	1.3280	1.4880	1.4060	1.3270	1.5040	0.0288	4.58%	0.00%
100		5	1.4080	1.3760	1.4400	1.4210	1.3810	1.4370	0.0115	1.83%	-0.01%

Combined Proportion Normal Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9420	0.9777	0.9643	0.9955	0.9732
100		0.9643	0.9777	0.9821	0.9643	0.9777

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	09-2050-9456	**Endpoint:**	Combined Proportion Normal	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:52	**Analysis:**	Parametric-Two Sample	**Status Level:**	1
Edit Date:	26 Jul-24 12:51	**MD5 Hash:**	EF3FDCA3FA08332687C48EB1865A6A55	**Editor ID:**	001-083-753-2

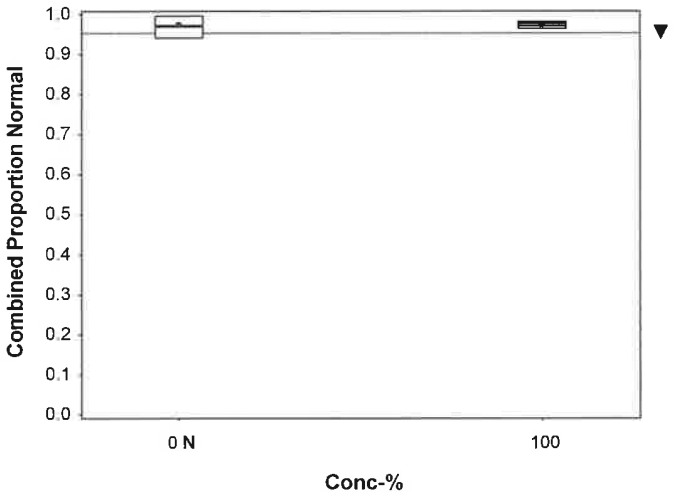
Angular (Corrected) Transformed Detail

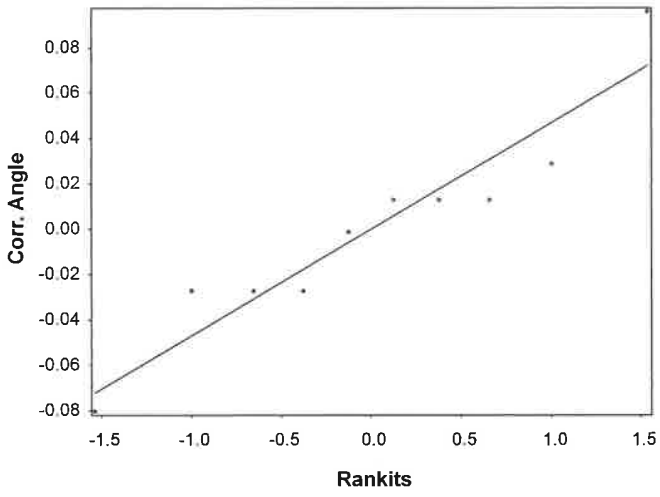
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.3270	1.4210	1.3810	1.5040	1.4060
100		1.3810	1.4210	1.4370	1.3810	1.4210

Combined Proportion Normal Binomials

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	211/224	219/224	216/224	223/224	218/224
100		216/224	219/224	220/224	216/224	219/224

Graphics





CETIS Measurement Report

Report Date: 26 Jul-24 12:53 (p 1 of 1)
Test Code/ID: EUR0624.184 / 13-4899-6111

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	20-2602-4058	**Test Type:**	Development-Survival	**Analyst:**		
Start Date:	18 Jun-24 13:15	**Protocol:**	EPA/600/R-95/136 (1995)	**Diluent:**	Laboratory Water	
Ending Date:	20 Jun-24 13:15	**Species:**	Mytilus galloprovincialis	**Brine:**		
Test Length:	48h	**Taxon:**	Bivalvia	**Source:**	Carlsbad Aquafarms CA	**Age:**
Sample ID:	20-9214-6826	**Code:**	EUR0624.184	**Project:**	Boeing SSFL NPDES	
Sample Date:	13 Jun-24 07:20	**Material:**	Sample Water	**Source:**	Bioassay Report	
Receipt Date:	13 Jun-24 14:00	**CAS (PC):**		**Station:**	RSW-002_Sed_20240613	
Sample Age:	5d 6h	**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	8.35	6.444	10.26	8.2	8.5	0.1061	0.2121	2.54%	0
100		2	9	6.459	11.54	8.8	9.2	0.1414	0.2828	3.14%	0
Overall		4	8.675	7.995	9.355	8.2	9.2	0.2136	0.4272	4.92%	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	32	32	32	32	32	0	0	0.00%	0
100		2	32	32	32	32	32	0	0	0.00%	0
Overall		4	32	32	32	32	32	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%)

Eurofins Calscience Irvine

570-188335 Chain of Custody

Loc: 570

188335 **CHAIN OF CUSTODY FORM**

188335

VLJOUVIKT

Client Name/Address:	Project:	ANALYSIS REQUIRED	Field Readings	Meter serial #
Haley & Aldrich 5333 Mission Center Rd Suite 300 San Diego, CA 92108	Boeing-SSFL NPDES Permit 2023 **Annual Sediment RSW-002** **Arroyo Simi-Downstream**		Field readings: (Include units) Time of readings 0705	
Eurofins Calscience Project Manager: Virendra Patel 2841 Dow Avenue, Suite #100 Tustin, CA 92780 Tel: 714-895-5494 **ECI Project #57013187**	Project Manager: Katherine Miller 520.289.8606, 520.904.6944 (cell)		pH 7.86 pH unit Temp 69.2 °C/F DO 2.32 mg/L Conductivity 3050 umhos/cm Velocity 0.0 ft/sec	
TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc.			Field readings QC Checked by: [signature] Date/Time: 0705	
Sampler: Adrien Mobeka	Field Manager: Mark Dominick 978.234.5033, 818.599.0702 (cell)			

Sample Description	Sample I.D.	Sampling Date/Time	Sample Matrix	Container Type	# of Cont.	Preservative	Bottle #	MS/MSD	A Total Ammonia (SM4500-NH3-D)	A Total Organic Carbon (9060)	A PCBs (SW8082)	A Chlordane, Dieldrin, Toxaphene, 4,4-DDD, 4,4-DDE, 4,4-DDT (SW8081A)	A 48-hour Bivalve Embryo toxicity (Mytilus edulis or Crassostrea gigas) (EPAR-95/136) ABC Labs in Ventura, CA	A Chronic 10-day echaustor/ius estuarius Toxicity (EPA/600/R-94/025) ABC Labs in Ventura, CA	A % Moisture (2540G)	A Particle Size Distribution (D422M)	Comments
Arroyo Simi Downstream	RSW-002_Sed_20240613	6/13/2024 0720	SE	9 oz Jar	1	None	165	No	X								
			SE	9 oz Jar	1	None	246	No		X							
			SE	9 oz Jar	1	None	280	No			X						
			SE	9 oz Jar	1	None	290	No				X					
			SE	1L wide mouth Plastic	1	None	295	No					X				Deliver to ABC Labs in Ventura, CA
			SE	1L wide mouth Plastic	4	4°C in the Dark	300	No						X			Keep sample in cooler in the dark until delivered to ABC Labs
			SE	9 oz Jar	1	None	305	No							X		
			SE	9 oz Jar	1	None	310	No								X	

Legend: A=Annual

Relinquished By	Date/Time:	Company:	Received By	Date/Time:
[signature]	6-13-2024	H&A 1350	[signature]	6/13/24 1350
[signature] EC	6/13/24	1820	[signature]	6-13-24 1820
			[signature]	6/13/24 1900

Turn-around time: (Check)
24 Hour: ____ 72 Hour: ____ 10 Day: X
48 Hour: ____ 5 Day: ____ Normal: ____

Sample Integrity: (Check)
Intact: ____ On Ice: ____

Store samples for 6 months.

Data Requirements: (Check)
No Level IV: ____ All Level IV: X

2.7/2.8 SCI4

AQUATIC BIOASSAY
& CONSULTING LABORATORIES, INC.

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

Start Date: June 18, 2024

Standard Toxicant: Ammonium Chloride

Endpoint: Survival

(Unionized Ammonia)

NOEC = 0.4270 mg/L

EC25 = 0.7347 mg/L
EC50 = 1.4820 mg/L

Yours very truly,

Scott Johnson
Laboratory Director

CETIS Summary Report

Reference Toxicant 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	02-5937-3753	**Test Type:**	Survival	**Analyst:**	
Start Date:	18 Jun-24 13:00	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Laboratory Seawater
Ending Date:	22 Jun-24 13:10	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Test Length:	4d 0h	**Taxon:**	Malacostraca	**Source:**	Northwestern Aquatic Scien **Age:**
Sample ID:	02-8467-2409	**Code:**	EOH061824	**Project:**	REF TOX
Sample Date:	13 Jun-24	**Material:**	Ammonia (Unionized)	**Source:**	Reference Toxicant
Receipt Date:	13 Jun-24	**CAS (PC):**		**Station:**	REF TOX
Sample Age:	5d 13h	**Client:**	Internal Lab		

Multiple Comparison Summary

Analysis ID	Endpoint	Comparison Method	✓	NOEL	LOEL	TOEL	PMSD	S
19-9349-8302	Survival Rate	Steel Many-One Rank Sum Test		0.427	0.786	0.5793	9.64%	1

Point Estimate Summary

Analysis ID	Endpoint	Point Estimate Method	✓	Level	mg/L	95% LCL	95% UCL	S
11-2314-4057	Survival Rate	Linear Interpolation (ICPIN)		EC15	0.5296	0.3168	0.6527	1
				EC20	0.6321	0.4188	0.7634	
				EC25	0.7347	0.6253	0.9292	
				EC40	1.172	0.9347	1.585	
				EC50	1.482	1.111	2.25	

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%
0.214		4	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	0.00%
0.427		4	0.9000	0.7701	1.0300	0.8000	1.0000	0.0408	0.0817	9.07%	10.00%
0.786		4	0.7250	0.6454	0.8046	0.7000	0.8000	0.0250	0.0500	6.90%	27.50%
1.559		4	0.4750	0.2748	0.6752	0.3000	0.6000	0.0629	0.1258	26.49%	52.50%
4.11		4	0.1000	-0.0299	0.2299	0.0000	0.2000	0.0408	0.0817	81.65%	90.00%

Survival Rate Detail — MD5: 0CE948202E010484E5C13C9CC9A40516

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.0000	1.0000	1.0000	1.0000
0.214		1.0000	1.0000	1.0000	1.0000
0.427		1.0000	0.9000	0.9000	0.8000
0.786		0.7000	0.7000	0.8000	0.7000
1.559		0.6000	0.5000	0.5000	0.3000
4.11		0.2000	0.1000	0.1000	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
0.214		10/10	10/10	10/10	10/10
0.427		10/10	9/10	9/10	8/10
0.786		7/10	7/10	8/10	7/10
1.559		6/10	5/10	5/10	3/10
4.11		2/10	1/10	1/10	0/10

CETIS Analytical Report

Reference Toxicant 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	19-9349-8302	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:23	**Analysis:**	Nonparametric-Control vs Treatments	**Status Level:**	1
Edit Date:	26 Jul-24 12:20	**MD5 Hash:**	0CE948202E010484E5C13C9CC9A40516	**Editor ID:**	001-083-753-2
Batch ID:	02-5937-3753	**Test Type:**	Survival	**Analyst:**	
Start Date:	18 Jun-24 13:00	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Laboratory Seawater
Ending Date:	22 Jun-24 13:10	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Test Length:	4d 0h	**Taxon:**	Malacostraca	**Source:**	Northwestern Aquatic Scien **Age:**
Sample ID:	02-8467-2409	**Code:**	EOH061824	**Project:**	REF TOX
Sample Date:	13 Jun-24	**Material:**	Ammonia (Unionized)	**Source:**	Reference Toxicant
Receipt Date:	13 Jun-24	**CAS (PC):**		**Station:**	REF TOX
Sample Age:	5d 13h	**Client:**	Internal Lab		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Angular (Corrected)	C > T	0.427	0.786	0.5793	---	0.09639	9.64%

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		0.214	6	18	10	1	CDF	0.8333	Non-Significant Effect
		0.427	6	12	10	1	CDF	0.1424	Non-Significant Effect
		0.786*	6	10	10	0	CDF	0.0417	Significant Effect
		1.559*	6	10	10	0	CDF	0.0417	Significant Effect
		4.11*	6	10	10	0	CDF	0.0417	Significant Effect

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	3.69904	0.739808	5	87.05	<1.0E-05	Significant Effect
Error	0.152969	0.0084983	18			
Total	3.85201		23			

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	1.878	4.248	0.1485	Equal Variances
	Mod Levene Equality of Variance Test	1.211	4.248	0.3440	Equal Variances
Distribution	Anderson-Darling A2 Test	2.014	3.878	<1.0E-05	Non-Normal Distribution
	D'Agostino Kurtosis Test	1.23	2.576	0.2188	Normal Distribution
	D'Agostino Skewness Test	0.6087	2.576	0.5427	Normal Distribution
	D'Agostino-Pearson K2 Omnibus Test	1.883	9.21	0.3901	Normal Distribution
	Kolmogorov-Smirnov D Test	0.2361	0.2056	0.0013	Non-Normal Distribution
	Shapiro-Wilk W Normality Test	0.8557	0.884	0.0028	Non-Normal Distribution

Survival Rate Summary

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
0.214		4	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
0.427		4	0.9000	0.7701	1.0000	0.9000	0.8000	1.0000	0.0408	9.07%	10.00%
0.786		4	0.7250	0.6454	0.8046	0.7000	0.7000	0.8000	0.0250	6.90%	27.50%
1.559		4	0.4750	0.2748	0.6752	0.5000	0.3000	0.6000	0.0629	26.49%	52.50%
4.11		4	0.1000	0.0000	0.2299	0.1000	0.0000	0.2000	0.0408	81.65%	90.00%

Reference Toxicant 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	19-9349-8302	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:23	**Analysis:**	Nonparametric-Control vs Treatments	**Status Level:**	1
Edit Date:	26 Jul-24 12:20	**MD5 Hash:**	0CE948202E010484E5C13C9CC9A40516	**Editor ID:**	001-083-753-2

Angular (Corrected) Transformed Summary

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	4	1.4120	1.4120	1.4120	1.4120	1.4120	1.4120	0.0000	0.00%	0.00%
0.214		4	1.4120	1.4120	1.4120	1.4120	1.4120	1.4120	0.0000	0.00%	0.00%
0.427		4	1.2540	1.0560	1.4530	1.2490	1.1070	1.4120	0.0623	9.93%	11.17%
0.786		4	1.0200	0.9279	1.1120	0.9912	0.9912	1.1070	0.0290	5.69%	27.75%
1.559		4	0.7591	0.5543	0.9640	0.7854	0.5796	0.8861	0.0644	16.96%	46.24%
4.11		4	0.3165	0.1182	0.5148	0.3218	0.1588	0.4636	0.0623	39.37%	77.59%

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
0.214		1.0000	1.0000	1.0000	1.0000
0.427		1.0000	0.9000	0.9000	0.8000
0.786		0.7000	0.7000	0.8000	0.7000
1.559		0.6000	0.5000	0.5000	0.3000
4.11		0.2000	0.1000	0.1000	0.0000

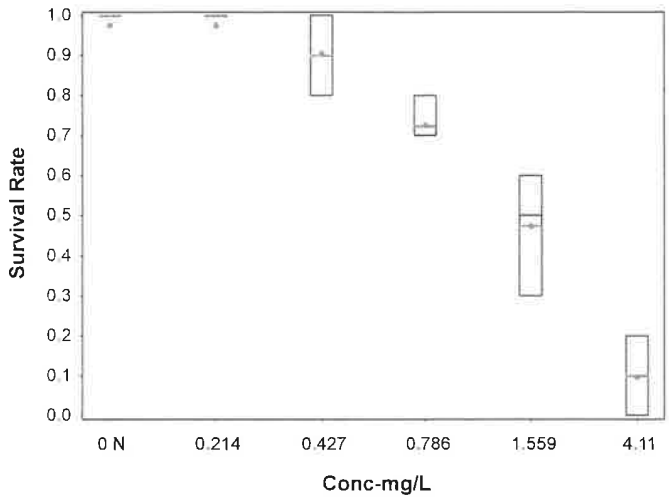
Angular (Corrected) Transformed Detail

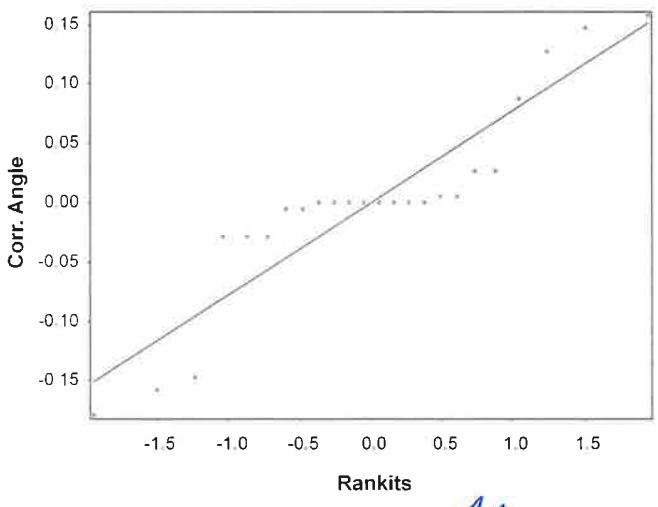
Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	1.4120	1.4120	1.4120	1.4120
0.214		1.4120	1.4120	1.4120	1.4120
0.427		1.4120	1.2490	1.2490	1.1070
0.786		0.9912	0.9912	1.1070	0.9912
1.559		0.8861	0.7854	0.7854	0.5796
4.11		0.4636	0.3218	0.3218	0.1588

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
0.214		10/10	10/10	10/10	10/10
0.427		10/10	9/10	9/10	8/10
0.786		7/10	7/10	8/10	7/10
1.559		6/10	5/10	5/10	3/10
4.11		2/10	1/10	1/10	0/10

Graphics





CETIS Analytical Report

Report Date: 26 Jul-24 12:54 (p 1 of 2)
Test Code/ID: EOH061824 / 06-7874-1926

Reference Toxicant 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	11-2314-4057	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:23	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1
Edit Date:	26 Jul-24 12:20	**MD5 Hash:**	0CE948202E010484E5C13C9CC9A40516	**Editor ID:**	001-083-753-2
Batch ID:	02-5937-3753	**Test Type:**	Survival	**Analyst:**	
Start Date:	18 Jun-24 13:00	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Laboratory Seawater
Ending Date:	22 Jun-24 13:10	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Test Length:	4d 0h	**Taxon:**	Malacostraca	**Source:**	Northwestern Aquatic Scien **Age:**
Sample ID:	02-8467-2409	**Code:**	EOH061824	**Project:**	REF TOX
Sample Date:	13 Jun-24	**Material:**	Ammonia (Unionized)	**Source:**	Reference Toxicant
Receipt Date:	13 Jun-24	**CAS (PC):**		**Station:**	REF TOX
Sample Age:	5d 13h	**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	0.5296	0.3168	0.6527
EC20	0.6321	0.4188	0.7634
EC25	0.7347	0.6253	0.9292
EC40	1.172	0.9347	1.585
EC50	1.482	1.111	2.25

Survival Rate Summary

			Calculated Variate(A/B)							Isotonic Variate	
Conc-mg/L	Code	Count	Mean	Median	Min	Max	CV%	%Effect	ΣA/ΣB	Mean	%Effect
0	N	4	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	40/40	1.0000	0.00%
0.214		4	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	40/40	1.0000	0.00%
0.427		4	0.9000	0.9000	0.8000	1.0000	9.07%	10.00%	36/40	0.9000	10.00%
0.786		4	0.7250	0.7000	0.7000	0.8000	6.90%	27.50%	29/40	0.7250	27.50%
1.559		4	0.4750	0.5000	0.3000	0.6000	26.49%	52.50%	19/40	0.4750	52.50%
4.11		4	0.1000	0.1000	0.0000	0.2000	81.65%	90.00%	4/40	0.1000	90.00%

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
0.214		1.0000	1.0000	1.0000	1.0000
0.427		1.0000	0.9000	0.9000	0.8000
0.786		0.7000	0.7000	0.8000	0.7000
1.559		0.6000	0.5000	0.5000	0.3000
4.11		0.2000	0.1000	0.1000	0.0000

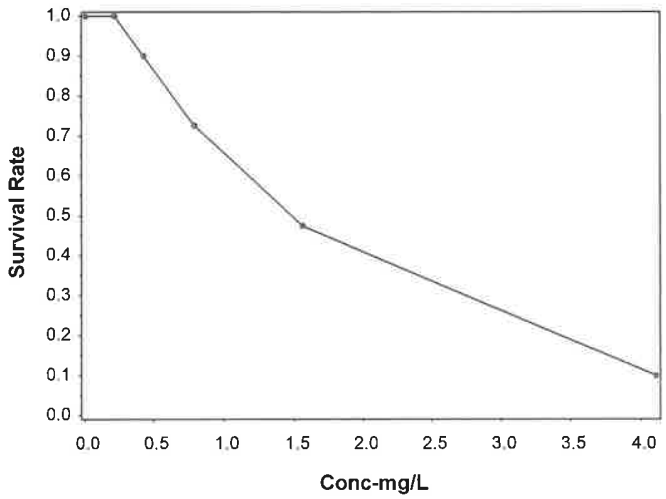
Survival Rate Binomials

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	N	10/10	10/10	10/10	10/10
0.214		10/10	10/10	10/10	10/10
0.427		10/10	9/10	9/10	8/10
0.786		7/10	7/10	8/10	7/10
1.559		6/10	5/10	5/10	3/10
4.11		2/10	1/10	1/10	0/10

Reference Toxicant 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	11-2314-4057	**Endpoint:**	Survival Rate	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:23	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1
Edit Date:	26 Jul-24 12:20	**MD5 Hash:**	0CE948202E010484E5C13C9CC9A40516	**Editor ID:**	001-083-753-2

Graphics



CETIS Measurement Report

Reference Toxicant 96-h Acute Survival Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	02-5937-3753	**Test Type:**	Survival	**Analyst:**	
Start Date:	18 Jun-24 13:00	**Protocol:**	EPA/600/R-94/025 (1994)	**Diluent:**	Laboratory Seawater
Ending Date:	22 Jun-24 13:10	**Species:**	Eohaustorius estuarius	**Brine:**	Not Applicable
Test Length:	4d 0h	**Taxon:**	Malacostraca	**Source:**	Northwestern Aquatic Scien **Age:**
Sample ID:	02-8467-2409	**Code:**	EOH061824	**Project:**	REF TOX
Sample Date:	13 Jun-24	**Material:**	Ammonia (Unionized)	**Source:**	Reference Toxicant
Receipt Date:	13 Jun-24	**CAS (PC):**		**Station:**	REF TOX
Sample Age:	5d 13h	**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	6.55	5.915	7.185	6.5	6.6	0.03535	0.0707	1.08%	0
0.214		2	6.4	3.859	8.941	6.2	6.6	0.1414	0.2828	4.42%	0
0.427		2	6.7	4.159	9.241	6.5	6.9	0.1414	0.2828	4.22%	0
0.786		2	6.55	5.915	7.185	6.5	6.6	0.03535	0.0707	1.08%	0
1.559		2	6.5	5.229	7.771	6.4	6.6	0.07071	0.1414	2.18%	0
4.11		2	6.35	4.444	8.256	6.2	6.5	0.1061	0.2121	3.34%	0
Overall		12	6.508	6.389	6.628	6.2	6.9	0.0543	0.1881	2.89%	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
0.214		2	12.4	12.37	12.43	12.4	12.4	0	0	0.00%	0
0.427		2	24.6	24.55	24.65	24.6	24.6	0	0	0.00%	0
0.786		2	42.5	42.5	42.5	42.5	42.5	0	0	0.00%	0
1.559		2	89.1	88.94	89.26	89.1	89.1	0	0	0.00%	0
4.11		2	187	187	187	187	187	0	0	0.00%	0
Overall		12	59.27	16.95	101.6	0	187	19.23	66.6	112.40%	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
0.214		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.427		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.786		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
1.559		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
4.11		2	7.6	7.594	7.606	7.6	7.6	0	0	0.00%	0
Overall		12	7.817	7.746	7.887	7.6	7.9	0.03218	0.1115	1.43%	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
0.214		2	20	20	20	20	20	0	0	0.00%	0
0.427		2	20	20	20	20	20	0	0	0.00%	0
0.786		2	20	20	20	20	20	0	0	0.00%	0
1.559		2	20	20	20	20	20	0	0	0.00%	0
4.11		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

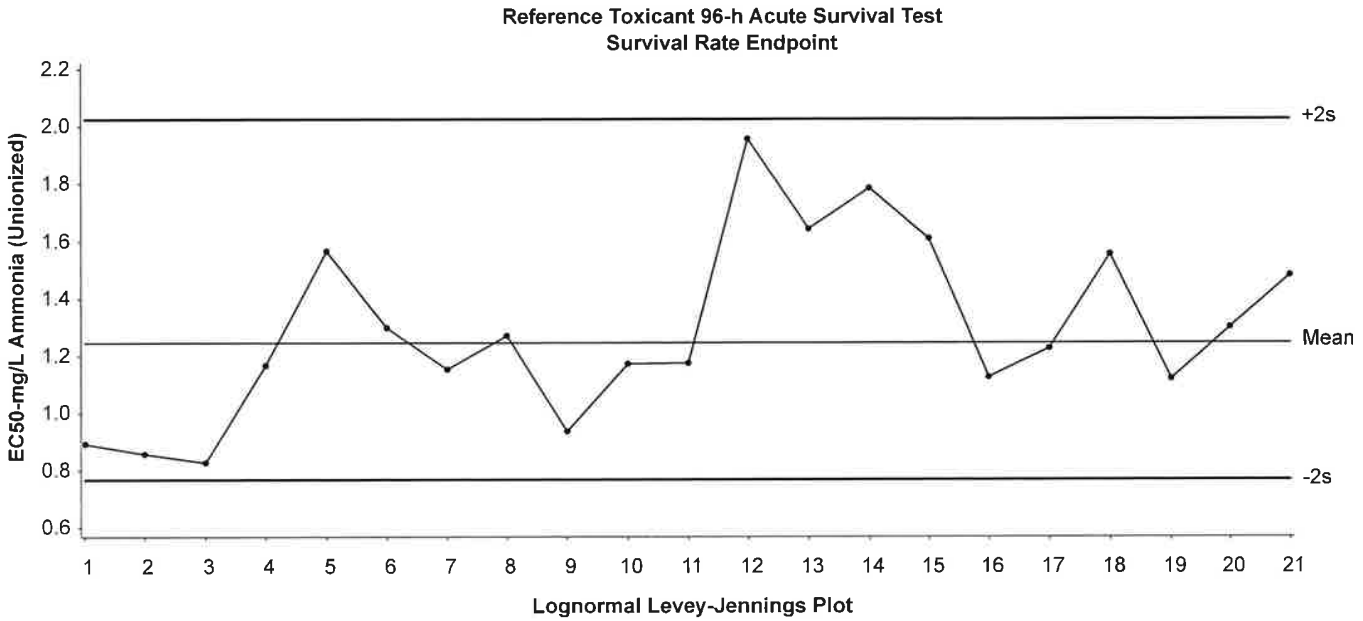
Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.214		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.427		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.786		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
1.559		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
4.11		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 QC Plot

Report Date: 26 Jul-24 13:39 (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



Mean:	1.247	**Count:**	20	**-2s Action Limit:**	0.767
Sigma:	NA	**CV:**	24.60%	**+2s Action Limit:**	2.03

Quality Control Data

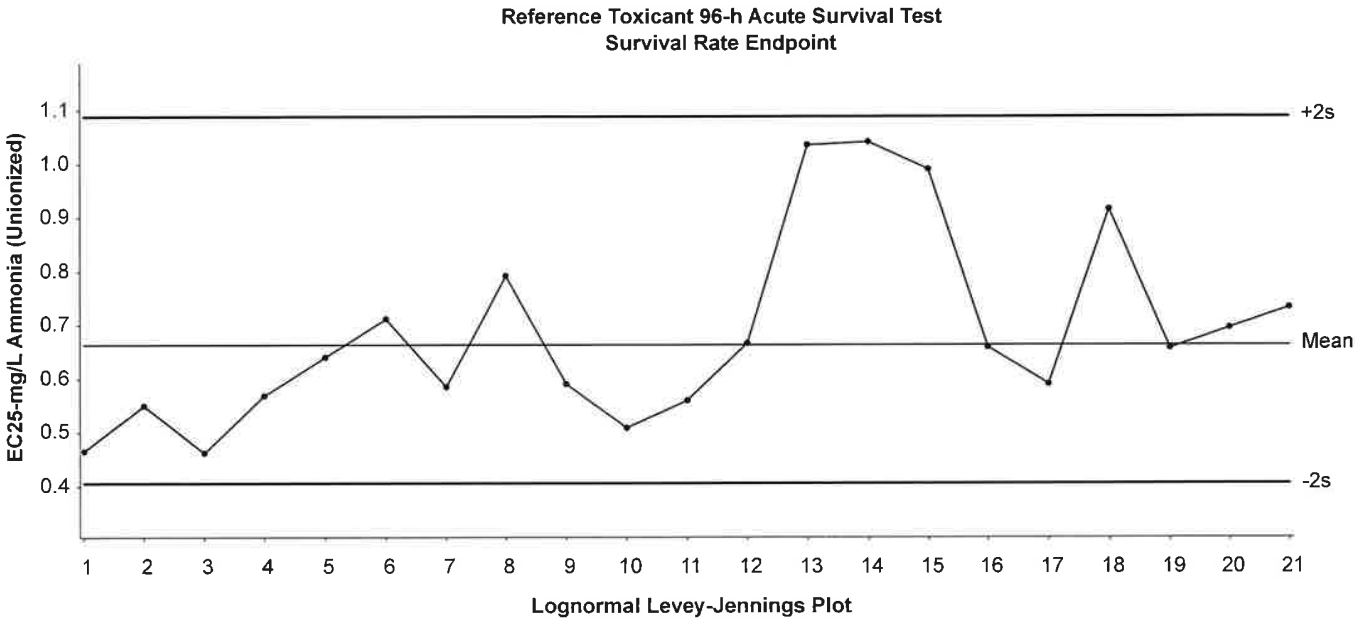
Point	Year	Month	Day	Time	QC Data	Delta	Sigma	Warning	Action	Test ID	Analysis ID
1	2022	Oct	3	0:00	0.893	-0.3536	-1.375			21-2304-8086	16-9591-8986
2		Nov	4	0:00	0.8585	-0.3881	-1.537			16-9369-5601	11-3448-8576
3			7	0:00	0.8268	-0.4197	-1.692			03-3351-6675	13-8879-1108
4		Dec	2	0:00	1.168	-0.07908	-0.2701			17-8142-3555	08-1606-2726
5	2023	Feb	7	0:00	1.566	0.3194	0.9403			13-7881-7820	16-7505-3336
6		Mar	14	0:00	1.298	0.05176	0.1677			02-2251-9261	06-5058-9447
7		Apr	11	0:00	1.152	-0.09458	-0.3252			15-3862-0322	19-4139-1538
8		May	16	12:00	1.272	0.02509	0.08214			01-5509-2940	01-3444-3670
9		Jun	20	15:00	0.9368	-0.3098	-1.178			13-9639-6920	04-5928-9253
10		Jul	10	0:00	1.172	-0.07458	-0.2543			15-4311-4554	19-3690-8885
11			18	0:00	1.175	-0.07124	-0.2426			09-2520-6456	08-1742-5933
12			25	0:00	1.956	0.7097	1.857			03-6557-2157	01-3531-2739
13		Aug	18	12:00	1.642	0.3952	1.135			16-7719-9022	02-8816-4118
14			24	12:15	1.784	0.5374	1.477			09-2704-4300	13-3997-5569
15		Oct	3	13:00	1.61	0.3636	1.055			00-6557-1278	10-1047-2771
16		Nov	3	0:00	1.125	-0.1212	-0.4218			03-7737-0953	12-7580-5754
17	2024	Jan	16	13:00	1.227	-0.01972	-0.06572			07-9028-6566	03-4516-2512
18		Feb	20	13:15	1.556	0.3094	0.9139			13-2388-5202	02-3847-6356
19		Mar	26	0:00	1.12	-0.1264	-0.4408			21-0717-1969	19-7484-9475
20		May	10	11:30	1.301	0.05476	0.1772			16-2470-2156	07-2498-9936
21		Jun	18	13:00	1.482	0.2351	0.7122			06-7874-1926	11-2314-4057

CETIS QC Plot

Report Date: 26 Jul-24 13:39 (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



Mean: 0.6644 **Count:** 20 **-2s Action Limit:** 0.405
Sigma: NA **CV:** 25.10% **+2s Action Limit:** 1.09

Quality Control Data

Point	Year	Month	Day	Time	QC Data	Delta	Sigma	Warning	Action	Test ID	Analysis ID
1	2022	Oct	3	0:00	0.4659	-0.1985	-1.435			21-2304-8086	16-9591-8986
2		Nov	4	0:00	0.5502	-0.1142	-0.7624			16-9369-5601	11-3448-8576
3			7	0:00	0.463	-0.2014	-1.46			03-3351-6675	13-8879-1108
4		Dec	2	0:00	0.5694	-0.09498	-0.6238			17-8142-3555	08-1606-2726
5	2023	Feb	7	0:00	0.6403	-0.02405	-0.1491			13-7881-7820	16-7505-3336
6		Mar	14	0:00	0.7118	0.04742	0.2788			02-2251-9261	06-5058-9447
7		Apr	11	0:00	0.5848	-0.07958	-0.5159			15-3862-0322	19-4139-1538
8		May	16	12:00	0.793	0.1286	0.7156			01-5509-2940	01-3444-3670
9		Jun	20	15:00	0.5913	-0.07307	-0.4712			13-9639-6920	04-5928-9253
10		Jul	10	0:00	0.5088	-0.1556	-1.079			15-4311-4554	19-3690-8885
11			18	0:00	0.56	-0.1044	-0.6911			09-2520-6456	08-1742-5933
12			25	0:00	0.6665	0.002119	0.01288			03-6557-2157	01-3531-2739
13		Aug	18	12:00	1.036	0.3717	1.797			16-7719-9022	02-8816-4118
14			24	12:15	1.041	0.377	1.817			09-2704-4300	13-3997-5569
15		Oct	3	13:00	0.9916	0.3272	1.619			00-6557-1278	10-1047-2771
16		Nov	3	0:00	0.6594	-0.00502	-0.03065			03-7737-0953	12-7580-5754
17	2024	Jan	16	13:00	0.5911	-0.07329	-0.4726			07-9028-6566	03-4516-2512
18		Feb	20	13:15	0.916	0.2516	1.299			13-2388-5202	02-3847-6356
19		Mar	26	0:00	0.658	-0.00638	-0.03902			21-0717-1969	19-7484-9475
20		May	10	11:30	0.6962	0.03187	0.1895			16-2470-2156	07-2498-9936
21		Jun	18	13:00	0.7347	0.07033	0.4069			06-7874-1926	11-2314-4057

AQUATIC BIOASSAY
& CONSULTING LABORATORIES, INC.

CHRONIC MYTILUS DEVELOPMENT BIOASSAY

Report ID: MYT061824

DATE: 6/18/2024

STANDARD TOXICANT: Unionized Ammonia

NOEC = 0.05000 mg/l

EC25 = 0.07540 mg/l
EC50 = 0.09938 mg/l

Yours very truly,

Scott Johnson
Laboratory Director

CETIS Summary Report

Report Date: 26 Jul-24 12:54 (p 1 of 1)
Test Code/ID: MYT061824 / 17-8879-4127

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	17-8327-5272	**Test Type:**	Development-Survival	**Analyst:**			
Start Date:	18 Jun-24 13:01	**Protocol:**	EPA/600/R-95/136 (1995)	**Diluent:**	Laboratory Seawater		
Ending Date:	20 Jun-24 13:02	**Species:**	Mytilus galloprovincialis	**Brine:**	Not Applicable		
Test Length:	48h	**Taxon:**	Bivalvia	**Source:**	Carlsbad Aquafarms CA	**Age:**	
Sample ID:	18-3174-9471	**Code:**	MYT061824	**Project:**	REF TOX		
Sample Date:	18 Jun-24	**Material:**	Ammonia (Unionized)	**Source:**	Reference Toxicant		
Receipt Date:	18 Jun-24	**CAS (PC):**		**Station:**	REF TOX		
Sample Age:	13h	**Client:**	Internal Lab				

Multiple Comparison Summary

Analysis ID	Endpoint	Comparison Method	✓	NOEL	LOEL	TOEL	PMSD	S
14-5428-1293	Combined Proportion Norma	Dunnett Multiple Comparison Test		0.05	0.075	0.06124	3.51%	1

Point Estimate Summary

Analysis ID	Endpoint	Point Estimate Method	✓	Level	mg/L	95% LCL	95% UCL	S
00-4929-5010	Combined Proportion Norma	Linear Interpolation (ICPIN)		EC15	0.06515	0.06062	0.07315	1
				EC20	0.07027	0.06453	0.07944	
				EC25	0.0754	0.06822	0.08325	
				EC40	0.09169	0.08688	0.09669	
				EC50	0.09938	0.0975	0.1013	

Test Acceptability

				TAC Limits			
Analysis ID	**Endpoint**	**Attribute**	**Test Stat**	**Lower**	**Upper**	**Overlap**	**Decision**
14-5428-1293	Combined Proportion Norma	PMSD	0.03509	<<	0.25	No	Passes Criteria

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	0.9571	0.9398	0.9745	0.9420	0.9777	0.0063	0.0140	1.46%	0.00%
0.028		5	0.9643	0.9472	0.9814	0.9420	0.9777	0.0062	0.0138	1.43%	-0.75%
0.05		5	0.9589	0.9384	0.9794	0.9375	0.9821	0.0074	0.0165	1.72%	-0.19%
0.075		5	0.7241	0.6296	0.8186	0.6295	0.8393	0.0340	0.0761	10.51%	24.35%
0.097		5	0.5295	0.4828	0.5761	0.4866	0.5848	0.0168	0.0376	7.09%	44.68%
0.119		5	0.0759	0.0548	0.0970	0.0580	0.1027	0.0076	0.0170	22.40%	92.07%

Combined Proportion Normal Detail — MD5: 39F800B95E67F0B78B7D4B1E7D826358

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9509	0.9420	0.9777	0.9509	0.9643
0.028		0.9643	0.9777	0.9420	0.9643	0.9732
0.05		0.9598	0.9643	0.9509	0.9375	0.9821
0.075		0.8393	0.7366	0.6295	0.6964	0.7188
0.097		0.5402	0.5312	0.5848	0.5045	0.4866
0.119		0.1027	0.0714	0.0804	0.0670	0.0580

Combined Proportion Normal Binomials

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	213/224	211/224	219/224	213/224	216/224
0.028		216/224	219/224	211/224	216/224	218/224
0.05		215/224	216/224	213/224	210/224	220/224
0.075		188/224	165/224	141/224	156/224	161/224
0.097		121/224	119/224	131/224	113/224	109/224
0.119		23/224	16/224	18/224	15/224	13/224

CETIS Analytical Report

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	14-5428-1293	**Endpoint:**	Combined Proportion Normal	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:46	**Analysis:**	Parametric-Control vs Treatments	**Status Level:**	1
Edit Date:	26 Jul-24 12:40	**MD5 Hash:**	39F800B95E67F0B78B7D4B1E7D826358	**Editor ID:**	001-083-753-2
Batch ID:	17-8327-5272	**Test Type:**	Development-Survival	**Analyst:**	
Start Date:	18 Jun-24 13:01	**Protocol:**	EPA/600/R-95/136 (1995)	**Diluent:**	Laboratory Seawater
Ending Date:	20 Jun-24 13:02	**Species:**	Mytilus galloprovincialis	**Brine:**	Not Applicable
Test Length:	48h	**Taxon:**	Bivalvia	**Source:**	Carlsbad Aquafarms CA **Age:**
Sample ID:	18-3174-9471	**Code:**	MYT061824	**Project:**	REF TOX
Sample Date:	18 Jun-24	**Material:**	Ammonia (Unionized)	**Source:**	Reference Toxicant
Receipt Date:	18 Jun-24	**CAS (PC):**		**Station:**	REF TOX
Sample Age:	13h	**Client:**	Internal Lab		

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Angular (Corrected)	C > T	0.05	0.075	0.06124	---	0.03358	3.51%

Dunnett 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	-0.5892	2.362	0.07407	CDF	0.9514	Non-Significant Effect
		0.05	8	-0.1798	2.362	0.07407	CDF	0.8810	Non-Significant Effect
		0.075*	8	10.96	2.362	0.07407	CDF	<1.0E-05	Significant Effect
		0.097*	8	17.53	2.362	0.07407	CDF	<1.0E-05	Significant Effect
		0.119*	8	34.66	2.362	0.07407	CDF	<1.0E-05	Significant Effect

Test Acceptability Criteria

		TAC Limits			
Attribute	**Test Stat**	**Lower**	**Upper**	**Overlap**	**Decision**
PMSD	0.03509	<<	0.25	No	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	4.82136	0.964273	5	392.2	<1.0E-05	Significant Effect
Error	0.0590088	0.0024587	24			
Total	4.88037		29			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test	6.594	15.09	0.2526	Equal Variances
	Levene Equality of Variance Test	0.9371	3.895	0.4749	Equal Variances
	Mod Levene Equality of Variance Test	0.9916	4.248	0.4503	Equal Variances
Distribution	Anderson-Darling A2 Test	0.5461	3.878	0.1639	Normal Distribution
	D'Agostino Kurtosis Test	2.059	2.576	0.0395	Normal Distribution
	D'Agostino Skewness Test	1.609	2.576	0.1076	Normal Distribution
	D'Agostino-Pearson K2 Omnibus Test	6.829	9.21	0.0329	Normal Distribution
	Kolmogorov-Smirnov D Test	0.1392	0.1853	0.1417	Normal Distribution
	Shapiro-Wilk W Normality Test	0.9523	0.9031	0.1944	Normal Distribution

Combined Proportion Normal Summary

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	0.9571	0.9398	0.9745	0.9509	0.9420	0.9777	0.0063	1.46%	0.00%
0.028		5	0.9643	0.9472	0.9814	0.9643	0.9420	0.9777	0.0062	1.43%	-0.75%
0.05		5	0.9589	0.9384	0.9794	0.9598	0.9375	0.9821	0.0074	1.72%	-0.19%
0.075		5	0.7241	0.6296	0.8186	0.7188	0.6295	0.8393	0.0340	10.51%	24.35%
0.097		5	0.5295	0.4828	0.5761	0.5312	0.4866	0.5848	0.0168	7.09%	44.68%
0.119		5	0.0759	0.0548	0.0970	0.0714	0.0580	0.1027	0.0076	22.40%	92.07%

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	14-5428-1293	**Endpoint:**	Combined Proportion Normal	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:46	**Analysis:**	Parametric-Control vs Treatments	**Status Level:**	1
Edit Date:	26 Jul-24 12:40	**MD5 Hash:**	39F800B95E67F0B78B7D4B1E7D826358	**Editor ID:**	001-083-753-2

Angular (Corrected) Transformed Summary

Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	N	5	1.3650	1.3190	1.4100	1.3470	1.3270	1.4210	0.0164	2.69%	0.00%
0.028		5	1.3830	1.3390	1.4270	1.3810	1.3270	1.4210	0.0159	2.57%	-1.35%
0.05		5	1.3700	1.3160	1.4250	1.3690	1.3180	1.4370	0.0197	3.22%	-0.41%
0.075		5	1.0210	0.9116	1.1310	1.0120	0.9164	1.1580	0.0395	8.64%	25.18%
0.097		5	0.8150	0.7681	0.8618	0.8167	0.7720	0.8706	0.0169	4.63%	40.28%
0.119		5	0.2778	0.2389	0.3168	0.2705	0.2433	0.3262	0.0140	11.29%	79.64%

Combined Proportion Normal Detail

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9509	0.9420	0.9777	0.9509	0.9643
0.028		0.9643	0.9777	0.9420	0.9643	0.9732
0.05		0.9598	0.9643	0.9509	0.9375	0.9821
0.075		0.8393	0.7366	0.6295	0.6964	0.7188
0.097		0.5402	0.5312	0.5848	0.5045	0.4866
0.119		0.1027	0.0714	0.0804	0.0670	0.0580

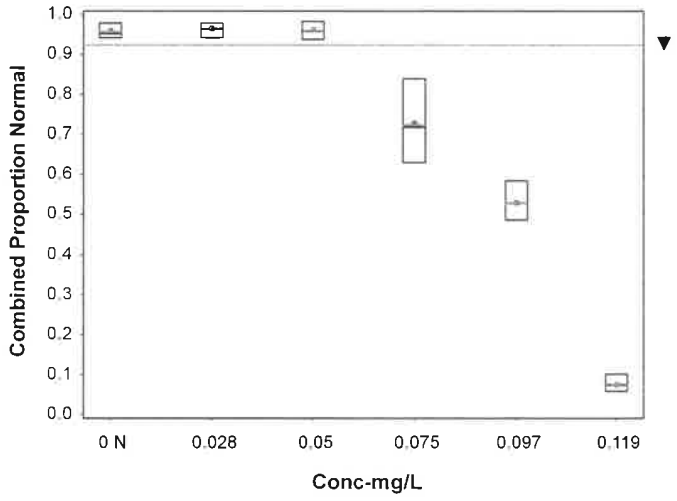
Angular (Corrected) Transformed Detail

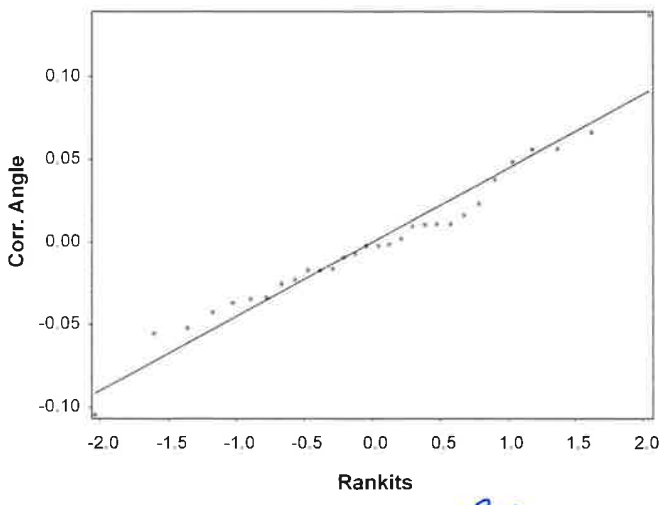
Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	1.3470	1.3270	1.4210	1.3470	1.3810
0.028		1.3810	1.4210	1.3270	1.3810	1.4060
0.05		1.3690	1.3810	1.3470	1.3180	1.4370
0.075		1.1580	1.0320	0.9164	0.9873	1.0120
0.097		0.8256	0.8167	0.8706	0.7899	0.7720
0.119		0.3262	0.2705	0.2874	0.2618	0.2433

Combined Proportion Normal Binomials

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	213/224	211/224	219/224	213/224	216/224
0.028		216/224	219/224	211/224	216/224	218/224
0.05		215/224	216/224	213/224	210/224	220/224
0.075		188/224	165/224	141/224	156/224	161/224
0.097		121/224	119/224	131/224	113/224	109/224
0.119		23/224	16/224	18/224	15/224	13/224

Graphics





CETIS Analytical Report

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	00-4929-5010	**Endpoint:**	Combined Proportion Normal	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:46	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1
Edit Date:	26 Jul-24 12:40	**MD5 Hash:**	39F800B95E67F0B78B7D4B1E7D826358	**Editor ID:**	001-083-753-2
Batch ID:	17-8327-5272	**Test Type:**	Development-Survival	**Analyst:**	
Start Date:	18 Jun-24 13:01	**Protocol:**	EPA/600/R-95/136 (1995)	**Diluent:**	Laboratory Seawater
Ending Date:	20 Jun-24 13:02	**Species:**	Mytilus galloprovincialis	**Brine:**	Not Applicable
Test Length:	48h	**Taxon:**	Bivalvia	**Source:**	Carlsbad Aquafarms CA **Age:**
Sample ID:	18-3174-9471	**Code:**	MYT061824	**Project:**	REF TOX
Sample Date:	18 Jun-24	**Material:**	Ammonia (Unionized)	**Source:**	Reference Toxicant
Receipt Date:	18 Jun-24	**CAS (PC):**		**Station:**	REF TOX
Sample Age:	13h	**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	0.06515	0.06062	0.07315
EC20	0.07027	0.06453	0.07944
EC25	0.0754	0.06822	0.08325
EC40	0.09169	0.08688	0.09669
EC50	0.09938	0.0975	0.1013

Combined Proportion Normal Summary

			Calculated Variate(A/B)							Isotonic Variate	
Conc-mg/L	Code	Count	Mean	Median	Min	Max	CV%	%Effect	ΣA/ΣB	Mean	%Effect
0	N	5	0.9571	0.9509	0.9420	0.9777	1.46%	0.00%	1072/1120	0.9607	0.00%
0.028		5	0.9643	0.9643	0.9420	0.9777	1.43%	-0.75%	1080/1120	0.9607	0.00%
0.05		5	0.9589	0.9598	0.9375	0.9821	1.72%	-0.19%	1074/1120	0.9589	0.19%
0.075		5	0.7241	0.7188	0.6295	0.8393	10.51%	24.35%	811/1120	0.7241	24.63%
0.097		5	0.5295	0.5312	0.4866	0.5848	7.09%	44.68%	593/1120	0.5295	44.88%
0.119		5	0.0759	0.0714	0.0580	0.1027	22.40%	92.07%	85/1120	0.0759	92.10%

Combined Proportion Normal Detail

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	0.9509	0.9420	0.9777	0.9509	0.9643
0.028		0.9643	0.9777	0.9420	0.9643	0.9732
0.05		0.9598	0.9643	0.9509	0.9375	0.9821
0.075		0.8393	0.7366	0.6295	0.6964	0.7188
0.097		0.5402	0.5312	0.5848	0.5045	0.4866
0.119		0.1027	0.0714	0.0804	0.0670	0.0580

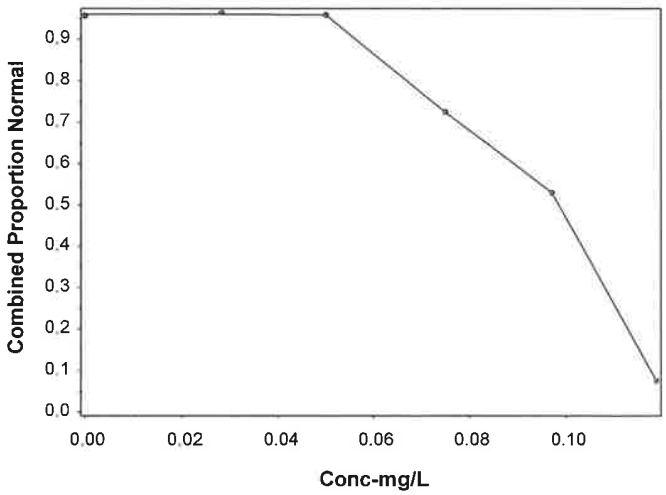
Combined Proportion Normal Binomials

Conc-mg/L	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	N	213/224	211/224	219/224	213/224	216/224
0.028		216/224	219/224	211/224	216/224	218/224
0.05		215/224	216/224	213/224	210/224	220/224
0.075		188/224	165/224	141/224	156/224	161/224
0.097		121/224	119/224	131/224	113/224	109/224
0.119		23/224	16/224	18/224	15/224	13/224

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Analysis ID:	00-4929-5010	**Endpoint:**	Combined Proportion Normal	**CETIS Version:**	CETISv2.1.4
Analyzed:	26 Jul-24 12:46	**Analysis:**	Linear Interpolation (ICPIN)	**Status Level:**	1
Edit Date:	26 Jul-24 12:40	**MD5 Hash:**	39F800B95E67F0B78B7D4B1E7D826358	**Editor ID:**	001-083-753-2

Graphics



CETIS Measurement Report

Report Date: 26 Jul-24 12:54 (p 1 of 2)
Test Code/ID: MYT061824 / 17-8879-4127

Mussel Shell Development Test — **Aquatic Bioassay & Consulting Labs, Inc.**

Batch ID:	17-8327-5272	**Test Type:**	Development-Survival	**Analyst:**		
Start Date:	18 Jun-24 13:01	**Protocol:**	EPA/600/R-95/136 (1995)	**Diluent:**	Laboratory Seawater	
Ending Date:	20 Jun-24 13:02	**Species:**	Mytilus galloprovincialis	**Brine:**	Not Applicable	
Test Length:	48h	**Taxon:**	Bivalvia	**Source:**	Carlsbad Aquafarms CA	**Age:**
Sample ID:	18-3174-9471	**Code:**	MYT061824	**Project:**	REF TOX	
Sample Date:	18 Jun-24	**Material:**	Ammonia (Unionized)	**Source:**	Reference Toxicant	
Receipt Date:	18 Jun-24	**CAS (PC):**		**Station:**	REF TOX	
Sample Age:	13h	**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	6.35	4.444	8.256	6.2	6.5	0.1061	0.2121	3.34%	0
0.05		2	6.75	4.844	8.656	6.6	6.9	0.1061	0.2121	3.14%	0
0.075		2	6.55	5.915	7.185	6.5	6.6	0.03535	0.0707	1.08%	0
0.097		2	6.9	6.889	6.911	6.9	6.9	0	0	0.00%	0
0.119		2	6.55	5.915	7.185	6.5	6.6	0.03535	0.0707	1.08%	0
Overall		12	6.642	6.502	6.781	6.2	6.9	0.06332	0.2193	3.30%	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
0.028		2	2.1	2.094	2.106	2.1	2.1	0	0	0.00%	0
0.05		2	3.6	3.594	3.606	3.6	3.6	0	0	0.00%	0
0.075		2	4.8	4.788	4.812	4.8	4.8	0	0	0.00%	0
0.097		2	6.4	6.384	6.416	6.4	6.4	0	0	0.00%	0
0.119		2	7.5	7.5	7.5	7.5	7.5	0	0	0.00%	0
Overall		12	4.067	2.388	5.745	0	7.5	0.7627	2.642	64.97%	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	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.05		2	7.9	7.884	7.916	7.9	7.9	0	0	0.00%	0
0.075		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
0.097		2	7.8	7.787	7.813	7.8	7.8	0	0	0.00%	0
0.119		2	7.7	7.698	7.702	7.7	7.7	0	0	0.00%	0
Overall		12	7.833	7.784	7.883	7.7	7.9	0.02247	0.07785	0.99%	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	32	32	32	32	32	0	0	0.00%	0
0.028		2	32	32	32	32	32	0	0	0.00%	0
0.05		2	32	32	32	32	32	0	0	0.00%	0
0.075		2	32	32	32	32	32	0	0	0.00%	0
0.097		2	32	32	32	32	32	0	0	0.00%	0
0.119		2	32	32	32	32	32	0	0	0.00%	0
Overall		12	32	32	32	32	32	0	0	0.00%	0 (0%)

Temperature-°C

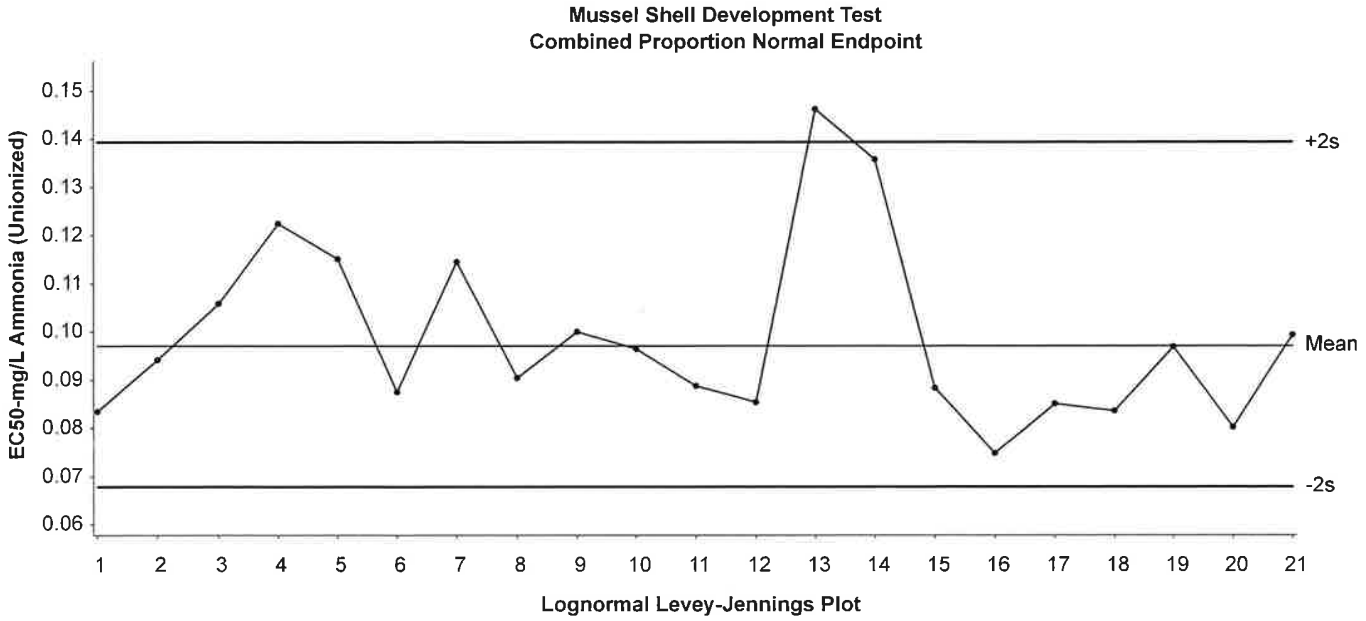
Conc-mg/L	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	QA Count
0	N	2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.028		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.05		2	14.85	14.21	15.49	14.8	14.9	0.03539	0.07077	0.48%	0
0.075		2	14.85	14.21	15.49	14.8	14.9	0.03539	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	14.9	14.87	14.93	14.9	14.9	0	0	0.00%	0
Overall		12	14.86	14.83	14.89	14.8	14.9	0.01486	0.05149	0.35%	0 (0%)

CETIS QC Plot

Report Date: 26 Jul-24 13:40 (1 of 1)

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



Mean:	0.0972	**Count:**	20	**-2s Action Limit:**	0.0678
Sigma:	NA	**CV:**	18.20%	**+2s Action Limit:**	0.139

Quality Control Data

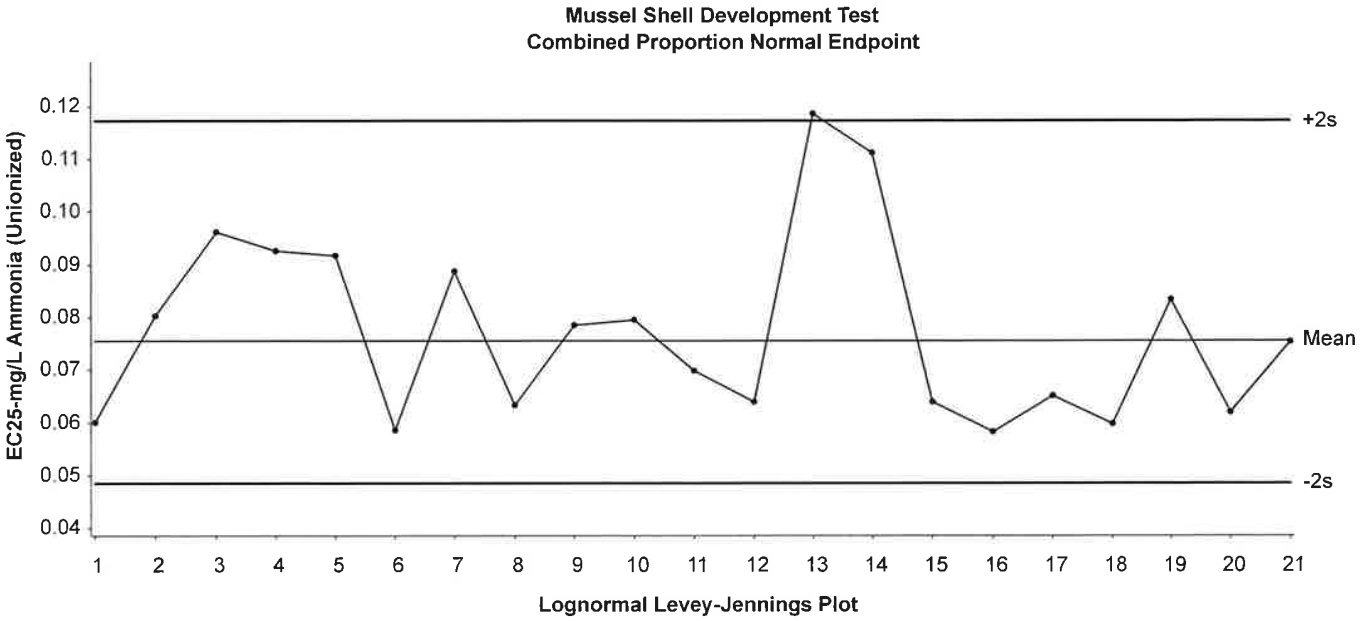
Point	Year	Month	Day	Time	QC Data	Delta	Sigma	Warning	Action	Test ID	Analysis ID
1	2022	May	10	14:00	0.08353	-0.01367	-0.8415			20-9731-2407	15-9311-1393
2		Jul	19	0:00	0.09414	-0.00306	-0.1774			08-6140-8733	00-5564-9108
3		Aug	2	12:00	0.1059	0.008717	0.4769			13-6671-3247	02-9996-1930
4			16	13:00	0.1224	0.02523	1.281			01-7140-1974	01-2411-3478
5		Sep	27	14:00	0.1152	0.01804	0.9451			08-8022-5531	15-5208-9875
6		Nov	8	13:00	0.0875	-0.0097	-0.5837			00-8153-7802	20-7691-1883
7			29	13:00	0.1145	0.0173	0.9093			14-7251-5122	04-0950-6311
8	2023	Jan	31	13:00	0.09055	-0.00665	-0.3937			10-1152-4502	03-1999-9437
9		Mar	14	13:00	0.1001	0.002923	0.1645			07-6209-8297	18-5380-7135
10		Apr	25	13:20	0.09647	-0.00073	-0.04172			07-8287-1831	06-9499-3898
11		May	16	13:00	0.08887	-0.00833	-0.4973			10-9034-7645	00-3803-8223
12		Jul	11	13:00	0.08536	-0.01184	-0.7214			16-2345-5718	00-1771-8860
13			19	0:00	0.1463	0.04911	2.271		(+)	00-6506-6524	03-8125-2487
14		Aug	16	13:00	0.1359	0.03869	1.861			00-8831-9073	14-7703-4151
15			22	16:00	0.08831	-0.00889	-0.5323			12-3822-4544	05-0427-9619
16		Oct	3	13:10	0.07484	-0.02235	-1.451			15-4650-9965	07-6798-0635
17			24	13:00	0.08506	-0.01214	-0.7407			01-3899-8986	11-4131-4541
18	2024	Jan	23	17:30	0.08365	-0.01355	-0.8335			04-8356-9518	19-6424-7825
19		Feb	20	13:30	0.09695	-0.00025	-0.01424			15-5918-9942	05-7037-2473
20		May	14	13:00	0.0803	-0.0169	-1.061			17-3164-6285	20-9920-0732
21		Jun	18	13:01	0.09938	0.002183	0.1233			17-8879-4127	00-4929-5010

CETIS QC Plot

Report Date: 26 Jul-24 13:40 (1 of 1)

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



Mean:	0.07547	**Count:**	20	**-2s Action Limit:**	0.0485
Sigma:	NA	**CV:**	22.30%	**+2s Action Limit:**	0.117

Quality Control Data

Point	Year	Month	Day	Time	QC Data	Delta	Sigma	Warning	Action	Test ID	Analysis ID
1	2022	May	10	14:00	0.06008	-0.01539	-1.034			20-9731-2407	15-9311-1393
2		Jul	19	0:00	0.08023	0.004756	0.277			08-6140-8733	00-5564-9108
3		Aug	2	12:00	0.09613	0.02066	1.097			13-6671-3247	02-9996-1930
4			16	13:00	0.09261	0.01714	0.9277			01-7140-1974	01-2411-3478
5		Sep	27	14:00	0.09171	0.01624	0.8832			08-8022-5531	15-5208-9875
6		Nov	8	13:00	0.05858	-0.0169	-1.149			00-8153-7802	20-7691-1883
7			29	13:00	0.08872	0.01325	0.7333			14-7251-5122	04-0950-6311
8	2023	Jan	31	13:00	0.0634	-0.01207	-0.7899			10-1152-4502	03-1999-9437
9		Mar	14	13:00	0.07853	0.003059	0.1801			07-6209-8297	18-5380-7135
10		Apr	25	13:20	0.07953	0.004058	0.2374			07-8287-1831	06-9499-3898
11		May	16	13:00	0.06983	-0.00564	-0.3523			10-9034-7645	00-3803-8223
12		Jul	11	13:00	0.06388	-0.0116	-0.7562			16-2345-5718	00-1771-8860
13			19	0:00	0.1186	0.04309	2.047		(+)	00-6506-6524	03-8125-2487
14		Aug	16	13:00	0.1112	0.03574	1.757			00-8831-9073	14-7703-4151
15			22	16:00	0.06398	-0.01149	-0.749			12-3822-4544	05-0427-9619
16		Oct	3	13:10	0.05835	-0.01712	-1.166			15-4650-9965	07-6798-0635
17			24	13:00	0.06513	-0.01034	-0.668			01-3899-8986	11-4131-4541
18	2024	Jan	23	17:30	0.05986	-0.01561	-1.05			04-8356-9518	19-6424-7825
19		Feb	20	13:30	0.08342	0.007949	0.4539			15-5918-9942	05-7037-2473
20		May	14	13:00	0.06199	-0.01348	-0.8922			17-3164-6285	20-9920-0732
21		Jun	18	13:01	0.0754	-6.8E-05	-0.00408			17-8879-4127	00-4929-5010

Eurofins Calscience Irvine

570-188335 Chain of Custody

Loc: 570

188335

188335

CHAIN OF CUSTODY FORM

VLJOUVKT

Client Name/Address:	Project:	Project Manager:	Field Manager:
Haley & Aldrich 5333 Mission Center Rd Suite 300 San Diego, CA 92108	Boeing-SSFL NPDES Permit 2023 **Annual Sediment RSW-002** **Arroyo Simi-Downstream**	Katherine Miller 520.289.8606, 520.904.6944 (cell)	Mark Dominick 978.234.5033, 818.599.0702 (cell)
Eurofins Calscience Project Manager: Virendra Patel 2841 Dow Avenue, Suite #100 Tustin, CA 92780 Tel: 714-895-5494 **ECI Project #57013187**			
TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2019-22-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc.			
Sampler: Adrien Mobeka			

Sample Description	Sample I.D.	Sampling Date/Time	Sample Matrix	Container Type	# of Cont.	Preservative	Bottle #	MS/MSD	A Total Ammonia (SM4500-NH3-D)	A Total Organic Carbon (9060)	A PCBs (SW8082)	A Chlordane, Dieldrin, Toxaphene, 4,4-DDD, 4,4-DDE, 4,4-DDT (SW8081A)	A 48-hour Bivalve Embryo toxicity (Mytilus edulis or Crassostrea gigas) (EPAR-95/136) ABC Labs in Ventura, CA	A Chronic 10-day echaustorius estuarius Toxicity (EPA/600/R-94/025) ABC Labs in Ventura, CA	A % Moisture (2540G)	A Particle Size Distribution (D422M)	Comments
Arroyo Simi Downstream	RSW-002_Sed_20240613	6/13/2024 0720	SE	9 oz Jar	1	None	165	No	X								
			SE	9 oz Jar	1	None	246	No		X							
			SE	9 oz Jar	1	None	280	No			X						
			SE	9 oz Jar	1	None	290	No				X					
			SE	1L wide mouth Plastic	1	None	295	No					X				Deliver to ABC Labs in Ventura, CA
			SE	1L wide mouth Plastic	4	4°C in the Dark	300	No						X			Keep sample in cooler in the dark until delivered to ABC Labs
			SE	9 oz Jar	1	None	305	No							X		
			SE	9 oz Jar	1	None	310	No								X	

Legend: A=Annual

Field Readings	Meter serial #
Field readings: (include units)	
Time of readings 0705	
pH 7.86 pH unit	
Temp 69.2 °C/F	
DO 2.32 mg/L	
Conductivity 3050 µmhos/cm	
Velocity 0.0 ft/sec	
Field readings QC	
Checked by: MDominick	
Date/Time: 0705	

Relinquished By	Date/Time:	Company:	Received By	Date/Time:
MDominick	6-13-2024	1358		6/13/24 1350
	EC 6/13/24	1820		6-13-24 1820

Turn-around time: (Check)
24 Hour: ____ 72 Hour: ____ 10 Day: X
48 Hour: ____ 5 Day: ____ Normal: ____

Sample Integrity: (Check)
Intact: ____ On Ice: ____
Store samples for 6 months.

Data Requirements: (Check)
No Level IV: ____ All Level IV: X

2.7/2.8 SCI4

2019-2020 Rainy Season
Version 2

Eurofins Calscience
2841 Dow Avenue, Suite 100
Tustin, CA 92780
Phone: 714-895-5494

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Patel Virendra	Carrier Tracking No(s):	COC No: 570-378556.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Virendra.Patel@et.eurofinsus.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State California; State Program California		Job #: 570-188335-2
Address: 4955 Yarrow Street,	Due Date Requested: 7/2/2024			Preservation Codes:
City: Arvada	TAT Requested (days):			
State, Zip: CO 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: Boeing NPDES SSFL Annual Sediment RSW-002	Project #: 57013187			
Site:	SSOW#:			Other

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9060A/ Solids TOC	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
RSW-002_Sed_20230613 (570-188335-1)	6/13/24	07:20 Pacific		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Calscience places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Calscience laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Calscience attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Calscience.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	6/17/24 1035	EC			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 04/02/2024

7/26/2024

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 570-188335-3
SDG Number: Arroyo Seimi-Downstream

Login Number: 188335
List Number: 1
Creator: Cruise, Noel

List Source: Eurofins Calscience

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Data Usability Summary Report

Project Name: The Boeing Company, Santa Susana Field Laboratory, NPDES

Project Description: Second Quarter 2024 Stormwater Samples

Sample Date(s): April through May 2024

Analytical Laboratory: Eurofins Calscience, Tustin, CA

Validation Performed by: Gabrielle Davis

Validation Reviewed by: Kristina Ilina

Validation Date: 16 July 2024

Haley & Aldrich, Inc. (Haley & Aldrich) prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for Sample Delivery Group(s) (SDG) listed. This DUSR is organized into the following sections:

1. **Level II, Second Quarter 2024, Various Methods Data Validation**
2. **Explanations**
3. **Glossary**
4. **Abbreviations**
5. **Qualifiers**

References

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

- USEPA Contract Laboratory Program (CLP) National Functional Guideline (NFG) for Chlorinated Dioxin/Furan Data Review;
- NFG for Inorganic Data Review; and
- Project-specific Quality Assurance Project Plan (QAPP), herein referred to as the specified limits (see References section).

Data reported in this sampling event were reported to the laboratory estimated detection limit (EDL) or method detection limit (MDL). Results found between the EDL or MDL and laboratory reporting limit (RL) are flagged “J” as estimated.

Sample data were qualified in accordance with the laboratory’s standard operating procedures (SOPs). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQO) for the project and are, therefore, usable; any exceptions are noted in the following pages.

1. Level II, Second Quarter 2024, Various Methods Data Validation

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG numbers listed in Table 1A.

Only samples analyzed for method E1613B and results that exceeded the permit limit were validated and included in this report.

Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol.

- Samples for E1613B analysis were subcontracted to Eurofins Sacramento in West Sacramento, CA.

Samples were also received appropriately, identified correctly, and analyzed according to the COC.

Analyses were performed on the samples listed in Table 1B. Method holding times are listed in Table 2.

1.2 CASE NARRATIVE

The laboratory report case narrative lists various additional quality control issues, such as continuing calibration verification (CCV) exceedances. Since these additional quality control issues were not required as per the QAPP, these quality control issues were not reviewed. Any additional issues are listed below:

- The retention time difference between 13C-1,2,3,4-TCDD and 13C-1,2,3,7,8,9-HxCDD run on instrument 10D5 exceeded the +/-15 second difference specified in Method 1613B. The retention time shift is caused by column maintenance and does not impact the chromatographic resolution, sensitivity, or identification of analytes. No additional qualification of the reported results is recommended.

1.3 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol, with the following exceptions:

- Method 1613B requires samples to have a pH of <2. The following samples were received with a pH of 7: Outfall001_20240415_Comp, Outfall008_20240415_Comp, Outfall002_20240415_Comp, Outfall009_20240415_Comp, INF002_20240422_Grab, Outfall002_20240424_Comp, Outfall018_20240424_Comp, INF001_20240426_Grab, Outfall001_20240501_Comp, and Outfall011_20240501_Comp. The samples were adjusted to the appropriate pH in the laboratory. No additional qualification of the reported results is recommended.

1.4 REPORTING LIMITS AND SAMPLE DILUTIONS

The RLs for the samples within this SDG met or were below the minimum RL requirements specified by the project specific QAPP.

All sample dilutions were reviewed and found to be justified. Only detected analytes were reported from a sample dilution analysis.

1.5 SURROGATE RECOVERY COMPLIANCE

Refer to Section E 1.2. The percent recovery (%R) for each surrogate compound added to each project sample were determined to be within the laboratory specified quality control (QC) limits.

1.6 LABORATORY CONTROL SAMPLES

Refer to Section E 1.3. Compounds associated with the laboratory control samples/laboratory control sample duplicates (LCS/LCSD) analyses associated with client samples exhibited recoveries and relative percent differences (RPDs) within the specified limits.

1.7 MATRIX SPIKE SAMPLES

Refer to Section E 1.4. The sample(s) below were used for matrix spike/matrix spike duplicate (MS/MSD):

Lab Sample Number	Matrix Spike/Matrix Spike Duplicate Sample Client ID	Method(s)
570-180570-1	Outfall001_20240415_Comp	E200.8
570-180578-1	Outfall002_20240415_Comp	E200.8
570-180582-1	Outfall009_20240415_Comp	E200.8

The MS/MSD recoveries and the RPD between the MS and MSD results were within the specified limits, with the following exceptions:

Sample Type	Method	Parent Sample	Analyte	%R/RPD	Qualifier	Affected Samples
MS	E200.8	Outfall001_20240415_Comp	Aluminum, Total	–0.3%	NA	None, sample result >4X spike
MS/MSD	E200.8	Outfall002_20240415_Comp	Aluminum, Total	165%/196%	NA	None, sample result >4X spike
MS	E200.8	Outfall009_20240415_Comp	Aluminum, Total	–105%	NA	None, sample result >4X spike

1.8 BLANK SAMPLE ANALYSIS

Refer to Section E 1.5. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred. Any exceptions are noted in Table 3.

1.9 DUPLICATE SAMPLE ANALYSIS

Refer to Section E 1.6. The laboratory did not analyze any laboratory duplicates as per the method or laboratory SOP.

1.10 PRECISION AND ACCURACY

Refer to Section E 1.7. Where required by the method, some measurement of analytical accuracy and precision was reported for each method with the site samples.

1.11 ESTIMATED MAXIMUM POSSIBLE CONCENTRATION (EMPC)

Refer to Section E 1.9. A result previously qualified as a non-detect for method blank contamination was not further qualified as an EMPC. The EMPC flags reported by the laboratory are listed in Table 4.

1.12 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the data quality objectives for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable with no rejected data. A summary of qualifiers applied to this data set is shown in Table 5.

2. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.2 Surrogate Recovery Compliance
  - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determining the efficiency of the extraction procedure by evaluating the %R of the compounds.
- E 1.3 Laboratory Control Samples
  - The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.4 Matrix Spike Samples
  - Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effects of the sample matrix on the sample preparation procedures and measurement methodologies.
  - For inorganic methods, when a matrix spike recovery falls outside of the control limits and the sample result is less than four times the spike added, a post-digestion spike (PDS) is performed.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
  - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the RPD found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a MS/MSD pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.
  - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the %R of certain spiked compounds. This can be assessed using LCS, blank spike (BS), MS, and/or surrogate recoveries.
- E 1.9 Estimated Maximum Possible Concentration
  - An Estimated Maximum Possible Concentration (EMPC) is a worst-case estimate of the concentration for a dioxin/furan or PCB based on all identification criteria being met except the ion abundance ratio criteria, or if a peak representing a chlorinated diphenyl ether was detected.

3. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
  - EB Equipment Blank Sample
  - FB Field Blank Sample
  - FD Field Duplicate Sample
  - N Primary Sample
  - TB Trip Blank Sample
- Units:
  - % SURVIVAL percent survival
  - µg/kg microgram per kilogram
  - µg/L microgram per liter
  - µg/m^3 microgram per cubic meter
  - mg/kg milligram per kilogram
  - mg/L milligram per liter
  - mL/L milliliter per liter
  - mpn/100mL most probable number per 100 milliliters
  - NTU nephelometric turbidity unit
  - pCi/L picocuries per liter
  - pg/g picogram per gram
  - pg/L picogram per liter
  - ppb v/v parts per billion volume/volume
  - umhos/cm micromhos per centimeter
- Matrices:
  - AA Ambient Air
  - GS Soil Gas
  - GW/WG Groundwater
  - IA Indoor Air
  - QW Water Quality
  - SE Sediment
  - SO Soil
  - SSV Sub-slab Vapor
  - WM Stormwater
  - WMQ/WQ Water Quality control matrix
  - WS Surface Water
- Table Footnotes:
  - NA Not applicable
  - ND Non-detect
  - NR Not reported
- Common Symbols:
  - % percent
  - < less than
  - ≤ less than or equal to
  - > greater than

  - ≥ greater than or equal to
  - = equal
  - °C degrees Celsius
  - ± plus or minus
  - ~ approximately
  - x times (multiplier)
- Fractions:
  - D Dissolved (filtered)
  - N Normal (method cannot be filtered)
  - T Total (unfiltered)

4. Abbreviations

%D	Percent Difference
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation
%v/v	Percent volume by volume
2s	2 sigma
4,4-DDT	4 4-dichlorodiphenyltrichloroethane
Abs Diff	Absolute Difference
amu	atomic mass unit
BPJ	Best Professional Judgement
BS	Blank Spike
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CCVL	Continuing Calibration Verification Low
COC	Chain of Custody
COM	Combined Isotope Calculation
Cr (VI)	Hexavalent Chromium
CRI	Collision Reaction Interface
DoD	Department of Defense
DQO	data quality objective
DUSR	Data Usability Summary Report
EIS	Extraction Internal Standard
EMPC	Estimated Maximum Possible Concentration
FBK	Field Blank Contamination
FDP	Field Duplicate
GC	Gas Chromatograph
GC/MS	Gas Chromatography/Mass Spectrometry
GPC	Gel Permeation Chromatography
H_2	Hydrogen gas
HCl	Hydrochloric Acid
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP/MS	Inductively Coupled Plasma/ Mass Spectrometry
ICV	Initial Calibration Verification
ICVL	Initial Calibration Verification Low
IPA	Isopropyl Alcohol
LC	Laboratory Control
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MBK	Method Blank Contamination
MDC	Minimum Detectable Concentration
MDL	Laboratory Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NA	not applicable
ND	Non-Detect
NFG	National Functional Guidelines
NH_3	Ammonia
NYSDEC	New York State Department of Environmental Conservation
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PDS	Post Digestion Spike
PEM	Performance Evaluation Mixture
PFAS	Per- and Polyfluoroalkyl Substances
PFBA	Perfluorbutanoic Acid
PFD	Perfluorodecalin
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane sulfonate
PFPeA	Perfluoropentanoic Acid
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
R^2	R-squared value
Ra-226	Radium-226
Ra-228	Radium-228
RESC	Resolution Check Measure
RER	Relative Error Ratio
RL	Laboratory Reporting Limit
RPD	Relative Percent Difference
RRF	Relative Response Factors
RT	Retention Time
SAP	sampling analysis plan
SDG	Sample Delivery Group
SIM	Selected ion monitoring
SOP	Standard Operating Procedures
SPE	Solid Phase Extraction
SVOC	Semi-Volatile Organic Compounds
TCLP	Toxicity Characteristic Leaching Procedure
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TPH	Total Petroleum Hydrocarbon
TPU	Total Propagated Uncertainty
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compounds
WP	Work Plan

5. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Laboratory Qualifiers:

BA	Relative percent difference out of control.
BU	Analyzed out of holding time.
BV	Sample received after holding time expired.
J,DX	Results found between the EDL or MDL and laboratory RL.
LM	MS and/or MSD above acceptance limits. See Blank Spike (LCS).
LN	MS and/or MSD below acceptance limits. See Blank Spike (LCS).
LR	LCS/LCSD recovery below method control limits.
LQ	LCS/LCSD recovery above method control limits.
MB	Analyte present in the method blank.
PI	Primary and confirm results varied by > than 40% RPD.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio; the measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.
U	Result is less than the sample detection limit.

- Validation Notes:

--	Based on validation of the data, a qualifier was not required.
*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.
B	Presumed contamination as indicated by the preparation (method) blank results.
C	Calibration %RSD or %D was noncompliant. [or] Correlation coefficient is <0.995.
D	The analysis with this flag should not be used because another more technically sound analysis is available.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.
E	Duplicates showed poor agreement.

F	Presumed contamination as indicated by the field blank (FB) or equipment blank (EB) results.
H	Holding times were exceeded.
I	Internal standard performance was unsatisfactory. [or] ICP ICS results were unsatisfactory.
L	LCS/LCSD % recovery or RPD was not within control limits.
L1	Laboratory control standard (LCS)/laboratory control standard duplicate (LCSD), relative percent difference (RPD) was outside the control limit.
Q	MS/MSD recovery or RPD was outside of control limits.
R	Calibration RRF was <0.05 or %R for calibration is not within control limits. [or] %R for calibration is not within control limits.
RPD	Pesticides and PCB Confirmation Column RPD Exceeded.
S	Surrogate recovery was outside QC limits. [or] The sequence or number of standards used for the calibration was incorrect.

- Validation Qualifiers:

=	No Qualifier.
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.
NJ	The analyte has been "tentatively identified" or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
R	As a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified.
U	Result not detected.
UJ	The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

References

1. United States Environmental Protection Agency (USEPA), 2011. *USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) and Chlorinated Dibenzofurans (CDFs) Data Review*. EPA-540-R-11-016. September.
2. United States Environmental Protection Agency, 2020. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. EPA-542-R-20-006. November.
3. Haley & Aldrich, Inc., 2015. *Quality Assurance Project Field Plan for Santa Susana Field Laboratory Stormwater Sampling Program*. December.

Attachments:

Table 1A - Sample Delivery Groups
Table 1B - Sample Information
Table 2 - Method Holding Times
Table 3 - Method Blanks Detections
Table 4 - EMPC Flags
Table 5 - Summary of Qualifiers

TABLE 1A
SAMPLE DELIVERY GROUPS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

Sample Delivery Group
5701805701
5701805703
5701805781
5701805783
5701805813
5701805821
5701805823
5701815423
5701816772
5701816932
5701820463
5701825402
5701825422

TABLE 1B
SAMPLE INFORMATION
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods[1]
Outfall001_20240415_Comp	N	570-180570-1	04/15/2024	WM	A, B
Outfall002_20240415_Comp	N	570-180578-1	04/15/2024	WM	A, B, C
Outfall008_20240415_Comp	N	570-180581-1	04/15/2024	WM	A
Outfall009_20240415_Comp	N	570-180582-1	04/15/2024	WM	A, B
INF002_20240422_Grab	N	570-181542-1	04/22/2024	WM	A
Outfall002_20240424_Comp	N	570-181677-1	04/24/2024	WM	A
Outfall018_20240424_Comp	N	570-181693-1	04/24/2024	WM	A
INF001_20240426_Grab	N	570-182046-1	04/26/2024	WM	A
Outfall001_20240501_Comp	N	570-182540-1	05/01/2024	WM	A
Outfall011_20240501_Comp	N	570-182542-1	05/01/2024	WM	A

Notes:
1. See Table 2

TABLE 2
METHOD HOLDING TIMES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

Letter Code	Method	Description	Holding Time(s)
A	E1613B	EPA Standard Method for High Resolution Analysis of Dioxins/Furans	1 year, preserved
B	E200.8	Metals (by Mass Spectrometer)	180 days for liquid, preserved
C	E300	Inorganic Anions (Sulfate)	28 days for liquid unpreserved

TABLE 3
METHOD BLANKS DETECTIONS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

SDG	Batch	Analyte Detected in Blank	Concentration	Qualifier	Affected Samples
570-180582-3	763327	OCDD	0.0000164 J,DX q	NA	None, sample >10X blank
570-181542-3	763415	1,2,3,4,7,8-HxCDD	0.00000126 J,DX q	Result U	INF002_20240422_Grab
		1,2,3,6,7,8-HxCDD	0.00000111 J,DX	NA	None, sample is ND
		1,2,3,7,8,9-HxCDD	0.000000959 J,DX q	NA	None, sample is ND
		1,2,3,7,8,9-HxCDF	0.000000778 J,DX q	Result U	INF002_20240422_Grab
		1,2,3,4,6,7,8-HpCDD	0.00000248 J,DX q		
		1,2,3,4,6,7,8-HpCDF	0.00000282 J,DX		
		1,2,3,4,7,8,9-HpCDF	0.00000169 J,DX		
		OCDD	0.00000690 J,DX q		
		OCDF	0.00000346 J,DX		
570-181677-2	763327	OCDD	0.0000164 J,DX q	Result U	Outfall002_20240424_Comp
570-181693-2	763327	OCDD	0.0000164 J,DX q	Result U	Outfall018_20240424_Comp
570-182046-3	768695	1,2,3,4,6,7,8-HpCDD	0.00000216 J,DX	Result U	INF001_20240426_Grab
		OCDD	0.0000113 J,DX		
		OCDF	0.00000359 J,DX		
570-182540-2	766911	1,2,3,4,7,8-HxCDD	0.00000332 J,DX	Result U	Outfall001_20240501_Comp
		1,2,3,6,7,8-HxCDD	0.00000175 J,DX q	NA	None, sample is ND
		1,2,3,7,8,9-HxCDD	0.00000183 J,DX q		
		1,2,3,4,7,8-HxCDF	0.00000178 J,DX q		
		1,2,3,6,7,8-HxCDF	0.00000190 J,DX		
		1,2,3,7,8,9-HxCDF	0.00000347 J,DX	Result U	Outfall001_20240501_Comp
		2,3,4,6,7,8-HxCDF	0.00000132 J,DX q		
		1,2,3,4,6,7,8-HpCDD	0.00000501 J,DX q		
		1,2,3,4,6,7,8-HpCDF	0.00000274 J,DX q		
		1,2,3,4,7,8,9-HpCDF	0.00000317 J,DX q		
		OCDD	0.00000873 J,DX q		
		OCDF	0.00000429 J,DX		
	767297	2,3,7,8-TCDF	0.00000208 J,DX	NA	None, sample is ND

TABLE 3
METHOD BLANKS DETECTIONS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

SDG	Batch	Analyte Detected in Blank	Concentration	Qualifier	Affected Samples
570-182542-2	766911	1,2,3,4,7,8-HxCDD	0.00000332 J,DX	Result U	Outfall011_20240501_Comp
		1,2,3,6,7,8-HxCDD	0.00000175 J,DX q	NA	None, sample is ND
		1,2,3,7,8,9-HxCDD	0.00000183 J,DX q		
		1,2,3,4,7,8-HxCDF	0.00000178 J,DX q		
		1,2,3,6,7,8-HxCDF	0.00000190 J,DX		
		1,2,3,7,8,9-HxCDF	0.00000347 J,DX	Result U	Outfall011_20240501_Comp
		2,3,4,6,7,8-HxCDF	0.00000132 J,DX q	NA	None, sample is ND
		1,2,3,4,6,7,8-HpCDD	0.00000501 J,DX q	Result U	Outfall011_20240501_Comp
		1,2,3,4,6,7,8-HpCDF	0.00000274 J,DX q		
		1,2,3,4,7,8,9-HpCDF	0.00000317 J,DX q	NA	None, sample is ND
		OCDD	0.00000873 J,DX q	Result U	Outfall011_20240501_Comp
		OCDF	0.00000429 J,DX		
	767297	2,3,7,8-TCDF	0.00000208 J,DX	NA	None, sample is ND

TABLE 4
EMPC FLAGS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

SDG #	Lab ID	Method	Analyte	Concentration (ug/L)	Qualifier	Affected Samples
5701816772	570-181677-1	E1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	1.4E-05	UJ	Outfall002_20240424_Comp
5701816772	570-181677-1	E1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	5.6E-06	UJ	Outfall002_20240424_Comp
5701805823	570-180582-1	E1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	4.5E-06	UJ	Outfall009_20240415_Comp
5701805823	570-180582-1	E1613B	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	2.1E-06	UJ	Outfall009_20240415_Comp
5701805823	570-180582-1	E1613B	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	3.2E-06	UJ	Outfall009_20240415_Comp
5701805823	570-180582-1	E1613B	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	3.7E-06	UJ	Outfall009_20240415_Comp
5701805823	570-180582-1	E1613B	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	3.3E-06	UJ	Outfall009_20240415_Comp
5701805823	570-180582-1	E1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	6.7E-06	UJ	Outfall009_20240415_Comp
5701805823	570-180582-1	E1613B	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	3.9E-06	UJ	Outfall009_20240415_Comp
5701805703	570-180570-1	E1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	9.3E-06	UJ	Outfall001_20240415_Comp

TABLE 5
SUMMARY OF QUALIFIERS
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

SDG#	Location	Sample ID	Sample Date	Lab ID	Method	Fraction	Analyte	Reportable Result	Result	Laboratory Qualifier	Final Validated Qualifier	Validation Note	Unit	Notes
5701805703	OUTFALL 001	Outfall001_20240415_Comp	4/15/2024	570-180570-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Yes	0.000013	J,DX	J	DNQ	ug/L	
5701805703	OUTFALL 001	Outfall001_20240415_Comp	4/15/2024	570-180570-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000093	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701805703	OUTFALL 001	Outfall001_20240415_Comp	4/15/2024	570-180570-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	Yes	0.000019	J,DX	J	DNQ	ug/L	
5701805783	OUTFALL 002	Outfall002_20240415_Comp	4/15/2024	570-180578-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Yes	0.000014	J,DX	J	DNQ	ug/L	
5701805783	OUTFALL 002	Outfall002_20240415_Comp	4/15/2024	570-180578-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	Yes	0.000013	J,DX	J	DNQ	ug/L	
5701805783	OUTFALL 002	Outfall002_20240415_Comp	4/15/2024	570-180578-1	E1613B	N	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000015	J,DX	J	DNQ	ug/L	
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Yes	0.000017	J,DX	J	DNQ	ug/L	
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000067	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	Yes	0.000018	J,DX	J	DNQ	ug/L	
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000045	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000039	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	Yes	0.0000040	J,DX	J	DNQ	ug/L	
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000037	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	Yes	0.0000063	J,DX	J	DNQ	ug/L	
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000032	J,DX	J	DNQ	ug/L	
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	Yes	0.0000050	J,DX	J	DNQ	ug/L	
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	Yes	0.0000032	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	Yes	0.0000037	J,DX	J	DNQ	ug/L	
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000033	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701805823	OUTFALL 009	Outfall009_20240415_Comp	4/15/2024	570-180582-1	E1613B	N	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	Yes	0.0000021	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701815423	SWTS018 (INF002)	INF002_20240422_Grab	4/22/2024	570-181542-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Yes	0.0000036	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701815423	SWTS018 (INF002)	INF002_20240422_Grab	4/22/2024	570-181542-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	Yes	0.000034	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701815423	SWTS018 (INF002)	INF002_20240422_Grab	4/22/2024	570-181542-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000021	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701815423	SWTS018 (INF002)	INF002_20240422_Grab	4/22/2024	570-181542-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	Yes	0.0000041	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701815423	SWTS018 (INF002)	INF002_20240422_Grab	4/22/2024	570-181542-1	E1613B	N	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000011	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701815423	SWTS018 (INF002)	INF002_20240422_Grab	4/22/2024	570-181542-1	E1613B	N	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	Yes	0.0000018	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701815423	SWTS018 (INF002)	INF002_20240422_Grab	4/22/2024	570-181542-1	E1613B	N	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000024	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701816772	OUTFALL 002	Outfall002_20240424_Comp	4/24/2024	570-181677-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Yes	0.000011	J,DX	J	DNQ	ug/L	
5701816772	OUTFALL 002	Outfall002_20240424_Comp	4/24/2024	570-181677-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	Yes	0.00013	MB	U	B	ug/L	Report ND at sample concentration
5701816772	OUTFALL 002	Outfall002_20240424_Comp	4/24/2024	570-181677-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000056	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701816772	OUTFALL 002	Outfall002_20240424_Comp	4/24/2024	570-181677-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	Yes	0.000014	J,DXq	UJ	*10	ug/L	Report ND at sample concentration
5701816932	OUTFALL 018	Outfall018_20240424_Comp	4/24/2024	570-181693-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	Yes	0.000019	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701820463	SWTS011 (INF001)	INF001_20240426_Grab	4/26/2024	570-182046-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Yes	0.0000068	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701820463	SWTS011 (INF001)	INF001_20240426_Grab	4/26/2024	570-182046-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	Yes	0.00011	MB	U	B	ug/L	Report ND at sample concentration
5701820463	SWTS011 (INF001)	INF001_20240426_Grab	4/26/2024	570-182046-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000044	J,DX	J	DNQ	ug/L	
5701820463	SWTS011 (INF001)	INF001_20240426_Grab	4/26/2024	570-182046-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	Yes	0.000011	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701825402	OUTFALL 001	Outfall001_20240501_Comp	5/1/2024	570-182540-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Yes	0.0000029	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701825402	OUTFALL 001	Outfall001_20240501_Comp	5/1/2024	570-182540-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	Yes	0.000037	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701825402	OUTFALL 001	Outfall001_20240501_Comp	5/1/2024	570-182540-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000017	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701825402	OUTFALL 001	Outfall001_20240501_Comp	5/1/2024	570-182540-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	Yes	0.0000052	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701825402	OUTFALL 001	Outfall001_20240501_Comp	5/1/2024	570-182540-1	E1613B	N	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000013	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701825402	OUTFALL 001	Outfall001_20240501_Comp	5/1/2024	570-182540-1	E1613B	N	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000027	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701825402	OUTFALL 001	Outfall001_20240501_Comp	5/1/2024	570-182540-1	E1613B	N	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000014	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701825402	OUTFALL 001	Outfall001_20240501_Comp	5/1/2024	570-182540-1	E1613B	N	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000015	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701825422	OUTFALL 011	Outfall011_20240501_Comp	5/1/2024	570-182542-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	Yes	0.0000023	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701825422	OUTFALL 011	Outfall011_20240501_Comp	5/1/2024	570-182542-1	E1613B	N	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	Yes	0.000016	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701825422	OUTFALL 011	Outfall011_20240501_Comp	5/1/2024	570-182542-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	Yes	0.0000018	J,DXMB	U	B	ug/L	Report ND at sample concentration
5701825422	OUTFALL 011	Outfall011_20240501_Comp	5/1/2024	570-182542-1	E1613B	N	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	Yes	0.0000022	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701825422	OUTFALL 011	Outfall011_20240501_Comp	5/1/2024	570-182542-1	E1613B	N	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	Yes	0.0000023	J,DXqMB	U	B	ug/L	Report ND at sample concentration
5701825422	OUTFALL 011	Outfall011_20240501_Comp	5/1/2024	570-182542-1	E1613B	N	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	Yes	0.0000012	J,DXqMB	U	B	ug/L	Report ND at sample concentration

Notes
U - Result not detected.
UJ - Result not detected at the estimated reporting limit.
J - Estimated value.
DNQ - The reported result is above the method detection limit but is less than the reporting limit.
B - Presumed contamination as indicated by the preparation (method) blank results.
**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.*

APPENDIX F

Receiving Water Surveys, Second Quarter 2024

TABLE F
RECEIVING WATER SURVEYS
SECOND QUARTER 2024
THE BOEING COMPANY - SSFL
NPDES PERMIT CA0001309

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 2024 BELL CREEK OBSERVATIONS AT OUTFALL 002			
BELL CREEK OBSERVATIONS	**APRIL**	**MAY**	**JUNE**
Date and time of inspection	4/14/2024, 08:50	N/A	N/A
Weather conditions	Cloudy	N/A	N/A
Color of water	Translucent	N/A	N/A
Appearance of oil films or grease, or floatable materials	Leaves	N/A	N/A
Extent of visible turbidity or color patches	None	N/A	N/A
Description of odor, if any	None	N/A	N/A
Presence or activity of California Least Tern or California Brown Pelican	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 2024 ARROYO SIMI OBSERVATIONS AT ARROYO SIMI DOWNSTREAM			
ARROYO SIMI OBSERVATIONS	**APRIL**	**MAY**	**JUNE**
Date and time of inspection	4/14/2024, 11:20	N/A	N/A
Weather conditions	Rainy	N/A	N/A
Color of water	Translucent, slight brown but mostly clear	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	Some turbidity	N/A	N/A
Description of odor, if any	None	N/A	N/A
Presence or activity of California Least Tern or California Brown Pelican	No	N/A	N/A

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

SECOND QUARTER 2024 ARROYO SIMI OBSERVATIONS AT ARROYO SIMI UPSTREAM			
ARROYO SIMI OBSERVATIONS	**APRIL**	**MAY**	**JUNE**
Date and time of inspection	4/14/2024, 10:45	N/A	N/A
Weather conditions	Cloudy, overcast, very light drizzle	N/A	N/A
Color of water	Translucent, light murky brown but mostly clear	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	Some visible turbidity	N/A	N/A
Description of odor, if any	None	N/A	N/A
Presence or activity of California Least Tern or California Brown Pelican	No	N/A	N/A

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

TABLE F

RECEIVING WATER SURVEYS

SECOND QUARTER 2024

THE BOEING COMPANY - SSFL

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SECOND QUARTER 2024 DAYTON CANYON CREEK OBSERVATIONS AT OUTFALL 008			
DAYTON CANYON CREEK OBSERVATIONS	**APRIL**	**MAY**	**JUNE**
Date and time of inspection	4/14/2024, 08:10	N/A	N/A
Weather conditions	Rainy	N/A	N/A
Color of water	Clear	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	None	N/A	N/A
Description of odor, if any	None	N/A	N/A
Presence or activity of California Least Tern or California Brown Pelican	No	N/A	N/A

Notes:

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