



---

**Suzanne LaFrance, Mayor**

# **2025 Stormwater Outfall Monitoring Report**

## **APDES Permit No. AKS052558**

**FINAL REPORT**

December 2025

**MUNICIPALITY OF ANCHORAGE**

**WATERSHED MANAGEMENT SERVICES**

Prepared for: Municipality of Anchorage  
Project Management and Engineering Department  
Watershed Management Services

Prepared by: HDR Inc.  
582 E. 36th Ave. Suite 500  
Anchorage, AK 99503

*This page intentionally left blank.*



## Table of Contents

<b>1.0</b>	<b>Introduction</b> .....	<b>1</b>
1.1	Background.....	1
1.2	Stormwater Definition.....	1
1.3	Monitoring Program Objectives .....	2
1.4	Report Organization.....	2
<b>2.0</b>	<b>Program Description and Methodology</b> .....	<b>3</b>
2.1	Monitoring Sites .....	3
2.2	Measured Parameters .....	7
2.3	Precipitation .....	8
2.4	Sampling Events .....	13
2.5	Sampling Handling and Chain of Custody Procedures .....	17
2.6	Laboratory Analyses .....	17
2.7	Deviation from the QAP .....	18
2.8	QA/QC and Data Validation .....	18
<b>3.0</b>	<b>Results and Discussion</b> .....	<b>19</b>
3.1	Field Measurements .....	19
3.2	Conventional Parameters (BOD5 and TSS).....	27
3.3	Fecal Coliform .....	27
3.4	Metals and Hardness .....	30
3.5	Hydrocarbons.....	33
3.6	Multi-Year Site Trends .....	38
3.7	Seasonal and Yearly Trends.....	49
3.8	Annual Loading .....	51
<b>4.0</b>	<b>Summary and Conclusions</b> .....	<b>54</b>
<b>5.0</b>	<b>References</b> .....	<b>55</b>



## Figures

Figure 1. Overview Map of Outfall Monitoring Sites and Subbasins.....	6
Figure 2. 2025 Monitoring Period and Cumulative Precipitation (in. of Water) at the PANC Weather Station.....	9
Figure 3. 2025 Monthly Precipitation Measured at the PANC Weather Station Compared to Normals. ....	10
Figure 4. Rainfall Measured at the Ben Boeke and Thomas Rain Gauges by Calendar Day.....	11
Figure 5. Rainfall Measured at the Lynwood and Eloise Spencer Rain Gauges by Calendar Day....	12
Figure 6. Flow Rates Measured at Monitoring Sites During All Four Events.....	20
Figure 7. Turbidity Measured in Stormwater Sampled at Monitoring Sites During All Four Events. ...	20
Figure 8. Dissolved Oxygen Measured in Stormwater Sampled at Monitoring Sites During All Four Events.....	21
Figure 9. Total Dissolved Solids Measured in Stormwater Sampled at Monitoring Sites During All Four Events. ....	22
Figure 10. pH (units) Measured in Stormwater Sampled at Monitoring Sites During All Four Events. ....	23
Figure 11. Temperature (°C) Measured in Stormwater Sampled at Monitoring Sites During All Four Events.....	23
Figure 12. BOD <sub>5</sub> (mg/L) Measured in Stormwater Sampled at Monitoring Sites During All Four Events.....	29
Figure 13. Total Suspended Solids Measured in Stormwater Sampled at Monitoring Sites During All Four Events. ....	29
Figure 14. Fecal Coliform (FC/100 mL) Measured in Stormwater Sampled at Monitoring Sites During All Four Events.....	30
Figure 15. Water Hardness (mg/L) Measured in Stormwater Samples. ....	31
Figure 16. Dissolved Copper (µg/L) Measured in Stormwater Samples.....	31
Figure 17. Total Aqueous Hydrocarbons (TAqH = TAH + TPAH) Measured in Stormwater Sampled at Monitoring Sites During All Four Events. ....	33
Figure 18. Station Box Plot of Temperature by Outfall, All Data 2011 Through 2025. ....	39
Figure 19. Station Box Plot of Dissolved Oxygen by Outfall, All Data 2011 Through 2025.....	40
Figure 20. Station Box Plot of pH by Outfall, All Data 2011 Through 2025. ....	41
Figure 21. Station Box Plot of Total Dissolved Solids by Outfall, All Data 2011 Through 2025. ....	42
Figure 22. Station Box Plot of Total Suspended Solids by Outfall, All Data 2011 Through 2025. ....	43
Figure 23. Station Box Plot of Turbidity by Outfall, All Data 2011 Through 2025. ....	44
Figure 24. Station Box Plot of BOD <sub>5</sub> by Outfall, All Data 2011 Through 2025.....	45
Figure 25. Station Box Plot of Fecal Coliform Bacteria by Outfall, All Data 2011 Through 2025. ....	46
Figure 26. Station Box Plot of Flow Rate by Outfall, All Data 2011 Through 2025.....	47
Figure 27. Station Box Plot of Hardness by Outfall, All Data 2016 Through 2025. ....	48
Figure 28. Station Box Plot of Dissolved Copper by Outfall, All Data 2016 Through 2025. ....	48
Figure 29. Seasonal Patterns for Temperature, DO, and Fecal Coliform, All Sites and All Years. ....	50
Figure 30. Fecal Coliform Annual Loading by Monitoring Site.....	52
Figure 31. Hydrocarbon Annual Loading by Monitoring Site.....	52



## Tables

Table 1. Outfalls Sampled Under the Stormwater Outfall Monitoring Program, 2011 – 2025.....	5
Table 2. Sample Type, Measurement Type, and Method of Analysis for Measured Parameters. ....	7
Table 3. Parameters Measured at Each Selected Outfall.....	8
Table 4. Precipitation Recorded During and Prior to Sampling Events (Measured by Calendar Day). .....	15
Table 5. Precipitation Data for Each Sampling Event Presented on Rolling Accumulation.....	16
Table 6. <i>In situ</i> Parameters Measured at Monitoring Sites During All Four Sampling Events.....	24
Table 7. Concentrations of Microbiological and Conventional Parameters. ....	26
Table 8. Concentrations of Hardness and Dissolved Copper. ....	32
Table 9. Hydrocarbon Concentrations Measured in Stormwater at Four Sites During All Four Storm Events.....	35
Table 10. Pertinent Numeric Alaska Water Quality Standard (AWQS) Criteria.....	36

## Appendices

Appendix A	Outfall Site Maps
Appendix B	Photographs
Appendix C	Laboratory Data Packages and Chain of Custodies
Appendix D	Field and Laboratory Data Validation
Appendix E	Field Logs

## List of Acronyms

°C	degrees Celsius
%	Percent
µg/L	Micrograms/Liter
ADEC	Alaska Department of Environmental Conservation
APDES	Alaska Pollutant Discharge and Elimination System
AWC	Anchorage Waterways Council
AWL	Alaska Water Laboratories
AWQS	Alaska Water Quality Standard
Ben Boeke	Rain Gauge at the Ben Boeke Indoor Ice Arena
BTEX	Benzene, Ethylbenzene, Toluene, and Xylenes
BMPs	Best Management Practices
BOD <sub>5</sub>	Biochemical Oxygen Demand (5 Day)
COC	Chain of Custody
CI	Commercial Industrial
Cu	Copper
CWA	Clean Water Act
DO	Dissolved Oxygen
DOT&PF	Alaska Department of Transportation and Public Facilities
DOY	Day of Year
Eloise Spencer	Rain Gauge at Elmore and Huffman Roads
EPA	U.S. Environmental Protection Agency
FC/100 mL	Fecal Coliform Units per 100 Milliliters
gpm	Gallons per Minute
Hr or Hrs	Hour or Hours
HGDB	Hydro-Geographic Database
L	Liter
LCS/LCSD	Laboratory Control Samples and Duplicates
mL	Milliliter
mg/L	Milligrams/Liter
MOA	Municipality of Anchorage
MS/MSD	Matrix Spike/Matrix Spike Duplicate
MS4	Municipal Separate Storm Sewer System
NADP	National Atmospheric Deposition Program
ND	Not Detected
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
OGS	Oil/Grit Separator
PAHs	Polycyclic Aromatic Hydrocarbons
PANC	NOAA National Weather Service Station at TSAIA
QA/QC	Quality Assurance/Quality Control
QAP	Monitoring, Evaluation, and Quality Assurance Plan
QC	Quality Control
SMRC	Stormwater Managers Resource Center.



SRMs	Standard Reference Material
SWM	Stormwater Outfall Monitoring
TAqH	Total Aqueous Hydrocarbons
TAH	Total Aromatic Hydrocarbons
TDS	Total Dissolved Solids
Thomas	Rain Gauge at Lake Otis Parkway and Tudor Road
TMDL	Total Maximum Daily Load
TNTC	Too Numerous to Count
TPAH	Total Polycyclic Aromatic Hydrocarbons
TSAIA	Ted Stevens Anchorage International Airport
TSS	Total Suspended Solids
USGS	United States Geological Survey

# 1.0 Introduction

This report details the findings of the 2025 Municipality of Anchorage (MOA) stormwater monitoring program. This program satisfies the stormwater outfall monitoring requirements of the current Municipal Separate Storm Sewer System (MS4) permit (Permit No. AKS052558) in compliance with the National Pollutant Discharge Elimination System (NPDES) established under the Clean Water Act (CWA).

## 1.1 Background

The U.S. Environmental Protection Agency (EPA) first issued a MS4 permit to the MOA and the Alaska Department of Transportation and Public Facilities (DOT&PF) in 1999. EPA reissued the permit in 2009 with the additional requirement to conduct stormwater outfall monitoring throughout the Anchorage Bowl (EPA 2009). After reissuance of the permit, EPA delegated the NPDES stormwater program to the Alaska Department of Environmental Conservation (ADEC), which now oversees its implementation and administration within the state as part of the Alaska Pollutant Discharge Elimination System (APDES). ADEC reissued the MS4 permit in 2015 and 2020, maintaining the requirement for stormwater outfall monitoring (ADEC 2020 and ADEC 2020b).

The Anchorage MS4 permit establishes control measures requiring the co-permittees to develop programs designed to prevent contaminants from entering the storm sewer system. The permit also identifies monitoring objectives, including stormwater outfall monitoring (Section 4.1.7 of the MS4 permit). MOA has taken the lead role in administering the stormwater outfall monitoring (SWM) program. The MS4 permit requires the selection of 10 priority outfall locations for stormwater monitoring that represent a variety of major land use areas within the Anchorage Bowl. It also requires selected outfall locations to be sampled four times each year during storm events that meet specific criteria for a designated set of physical and chemical parameters. Stormwater sampling conducted during 2025 represents the fifth year of monitoring under the 2020 MS4 permit and the 14<sup>th</sup> year of monitoring selected outfalls during storm events.

This report and the data collected under the SWM Program fulfill the annual outfall monitoring objectives of the MS4 permit. The current permit went into effect on August 1, 2020, expired on July 31, 2025, and has been administratively extended until a new permit is issued.

## 1.2 Stormwater Definition

Urban stormwater is a major contributor of pollution to the nation's waterways (EPA 1983). Precipitation and snowmelt events cause runoff that can transport urban contaminants into streams, rivers, and lakes. The runoff from impermeable surfaces such as roads, driveways, and sidewalks, as well as from semi-permeable surfaces such as golf courses, lawns, and gardens can carry a variety of pollutants through the storm sewer, generally discharging directly into local waterways without treatment. The EPA and delegated states, of which Alaska is one, use the MS4 permit to control these pollutants and limit contamination of local waterbodies.

Section 303(d) of the CWA requires that states submit to EPA a list of impaired waterbodies and develop water quality management plans, in the form of Total Maximum Daily Loads (TMDLs) for those waters. The current MS4 permit cites the Final DEC 2014/2016 Integrated Report that identifies 11 Anchorage-area waterbodies as impaired for fecal coliform (ADEC 2018). These



waterbodies include Campbell Creek, Campbell Lake, Chester Creek, Fish Creek, Furrow Creek, Little Campbell Creek, Little Rabbit Creek, Little Survival Creek, Ship Creek, University Lake, and Westchester Lagoon. ADEC has developed, and EPA has approved, TMDLs for fecal coliform for all 11 listed waterbodies. The TMDL implementation plans identify urban runoff as the major contributor of fecal coliform pollution and establish specific reduction goals to improve stormwater quality and reduce the resulting impact on receiving waters.

Since 2010, ADEC has updated the listings for Ship Creek and Hood/Spenard Lake. The petroleum products impairment was removed from Ship Creek in 2012, following monitoring that demonstrated that the analytical indicators for petroleum hydrocarbons were not present in sufficient concentrations to exceed water quality criteria. Ship Creek remains impaired for fecal coliform. Hood/Spenard Lake is no longer included on the Section 303(d) list of impaired waters. Following implementation of improved stormwater management practices and a waterfowl hazing program at the Ted Stevens Anchorage International Airport (TSAIA), water quality data has shown that Hood/Spenard Lake meets water quality criteria for fecal coliform and dissolved oxygen (DO). The fecal coliform bacteria impairment was removed in 2010 and the DO impairment was removed in 2016.

### 1.3 Monitoring Program Objectives

The overarching objectives of the monitoring program established in the Anchorage MS4 permit are to characterize the quality of stormwater discharges from the MS4 and track the effectiveness of best management practices (BMPs) implemented as part of the TMDL implementation plans. The SWM Program aims to meet these objectives through continued monitoring of 10 outfalls through the permit term. The SWM Program meets the following objectives specified in the MS4 permit:

- Broadly estimate the annual stormwater loading of fecal coliform and petroleum products discharged into specific watersheds from the MS4.
- Assess the effectiveness of existing stormwater controls in reducing fecal coliform bacteria and petroleum product contamination.
- Identify and prioritize portions of the MS4 that need additional controls.

As of 2018, no waterbody in the Anchorage MS4 permit area is included on the Section 303(d) list of impaired waters for petroleum product contamination (ADEC 2018). However, because petroleum products were identified as a contaminant of concern in the 2015 MS4 permit, and because stormwater runoff has the potential to transport petroleum products from a variety of sources, the stormwater outfall monitoring program continues to measure petroleum product contamination.

### 1.4 Report Organization

Section 2.0 of this report includes an overview of the SWM Program and provides background information regarding the outfall site selection process, the water quality parameters tested, and procedures followed as required by the MS4 permit. This section also details 2025 fieldwork conducted under the Program, and includes a discussion of the sampling events and the associated weather and precipitation data. Discussion of field-sampling procedures, sample handling and chain of custody, laboratory analyses, quality control, and data validation procedures is included.

Section 3.0 presents the results of the 2025 SWM Program, including tabular and graphical summaries of field measurements and lab data, as well as a discussion of results, site trends, yearly and seasonal trends, and annual loading from MS4 discharge.

Section 4.0 of the report presents a summary of findings as well as preliminary conclusions. References are included in Section 5.0. The body of the report is followed by appendices, which include site maps (Appendix A), field photographs (Appendix B), laboratory data reports (Appendix C), data validation summaries (Appendix D), and field log forms (Appendix E).

## 2.0 Program Description and Methodology

The SWM Program was developed to meet the MS4 permit requirements and is defined in the updated *Monitoring, Evaluation, and Quality Assurance Plan (QAP)* for the MS4 permit (MOA 2020). Appendix B of the QAP, *Stormwater Outfall Monitoring Plan* specifically details the SWM Program, including the program design rationale, sampling methodology and protocols, field team training requirements, and results to be presented in the annual report.

### 2.1 Monitoring Sites

Per the requirements of the MS4 permit, the *Stormwater Outfall Monitoring Plan* includes a list of 30 outfalls prioritized as high and medium priority monitoring locations. The MOA developed the list to meet the requirements of the 2009 MS4 permit.

The methodology used to define the monitoring corridor and identify and prioritize the outfalls is described in the QAP (MOA 2020). Under the 2009 MS4 permit, the MOA selected and ranked 30 subbasins within a targeted area of the Anchorage Bowl for inclusion in the SWM Program (MOA 2011). Selected subbasins include those zoned for a single predominant land use, subbasins zoned for mixed land uses, and subbasins with and without oil and grit separator (OGS) devices. These subbasins were then ranked based on the area of impervious surface directly connected to the storm drain system leading to the outfall, access to the outfall, and accessibility of the outfall from legal parking.

The SWM Program began in 2011 with ten priority outfalls selected for sampling. To facilitate sample labeling and simplify outfall identification in the field, the outfalls were sequentially numbered from south to north along the monitoring corridor (SWM01 through SWM10).

Two outfalls, SWM01 and SWM02, were sampled from 2011 through 2016. However, these outfalls were replaced in 2017. SWM01 was discontinued due to inconsistent flow and the small size of the drainage area. The replacement outfall, SWM11, also drains a residential land use subbasin and has a larger drainage area than SWM01. SWM02 was discontinued when it was determined that the outfall is not truly representative of the contributing land use area as a result of influence of streamflow from Little Campbell Creek. SWM02 was replaced with SWM12, which also drains a commercial and industrial land use subbasin. SWM11 and SWM12 were not included on the original list of 30 prioritized subbasins but were selected because their location in the monitoring corridor and the characteristics of their subbasins are similar to those of SWM01 and SWM02.

From 2011 through 2020, SWM09 was sampled. SWM09 is located near the Anchorage Football Stadium and drains the area around Ben Boeke and Sullivan Arenas. In 2020, SWM09's storm drain system was reconstructed and routed to a new outfall approximately 320 feet to the east, near the

east end of the Bonnie Cusack Outdoor Ice Skating Arena. The original outfall, SWM09, was left in place but now drains a significantly smaller area. The new outfall, SWM09A, replaces SWM09 and drains a similar characterized subbasin around Ben Boeke and Sullivan Arenas. The reconstruction also affected the subbasin to the east, which outfalls to SWM07. SWM07's subbasin increased by 1.76 acres and its percent impervious area increased by six percent. Updated outfall characteristics are provided in Table 1.

SWM03 and SWM04 are located near Sylvan Drive and drain a residential area east of Campbell Creek. Though these outfalls are close together, SWM03 has a far larger drainage area. SWM05 is located at the end of East 56<sup>th</sup> Avenue and drains a commercial and industrial area south of International Airport Road and east of C Street. SWM06 is located at the end of Maplewood Street and drains a residential area north of Northern Lights Boulevard. SWM07 and SWM08 are located at the Seward Highway where Chester Creek passes beneath the highway. They drain a commercial and industrial area north of the creek and a mixed land use area south of the creek, respectively. SWM09A is located near the Bonnie Cusack Outdoor Ice Skating Arena and drains the area around Ben Boeke and Sullivan Arenas. SWM10 is located at the end of Eagle Street and drains a mixed commercial and residential area south of Chester Creek. SWM11 is located at Johns Road and Botanical Circle and drains a large residential area north of Furrow Creek. SWM12 drains a commercial and industrial area near the Old Seward Highway and represents the inflow to the Lynwood retention basin.

Table 1 presents the characteristics of the outfalls sampled under the SWM Program, including physical location, geographic location, outfall dimensions, acreage of subbasin, and percent impervious surface of the subbasin. Figure 1 shows the locations of the 10 currently monitored outfalls and subbasins within the monitoring corridor. Figure 1 also shows the locations of four tipping bucket rain gauges installed along the monitoring corridor in 2025. Detailed site maps showing the outfalls and the land use types of the contributing subbasins are included as Appendix A.

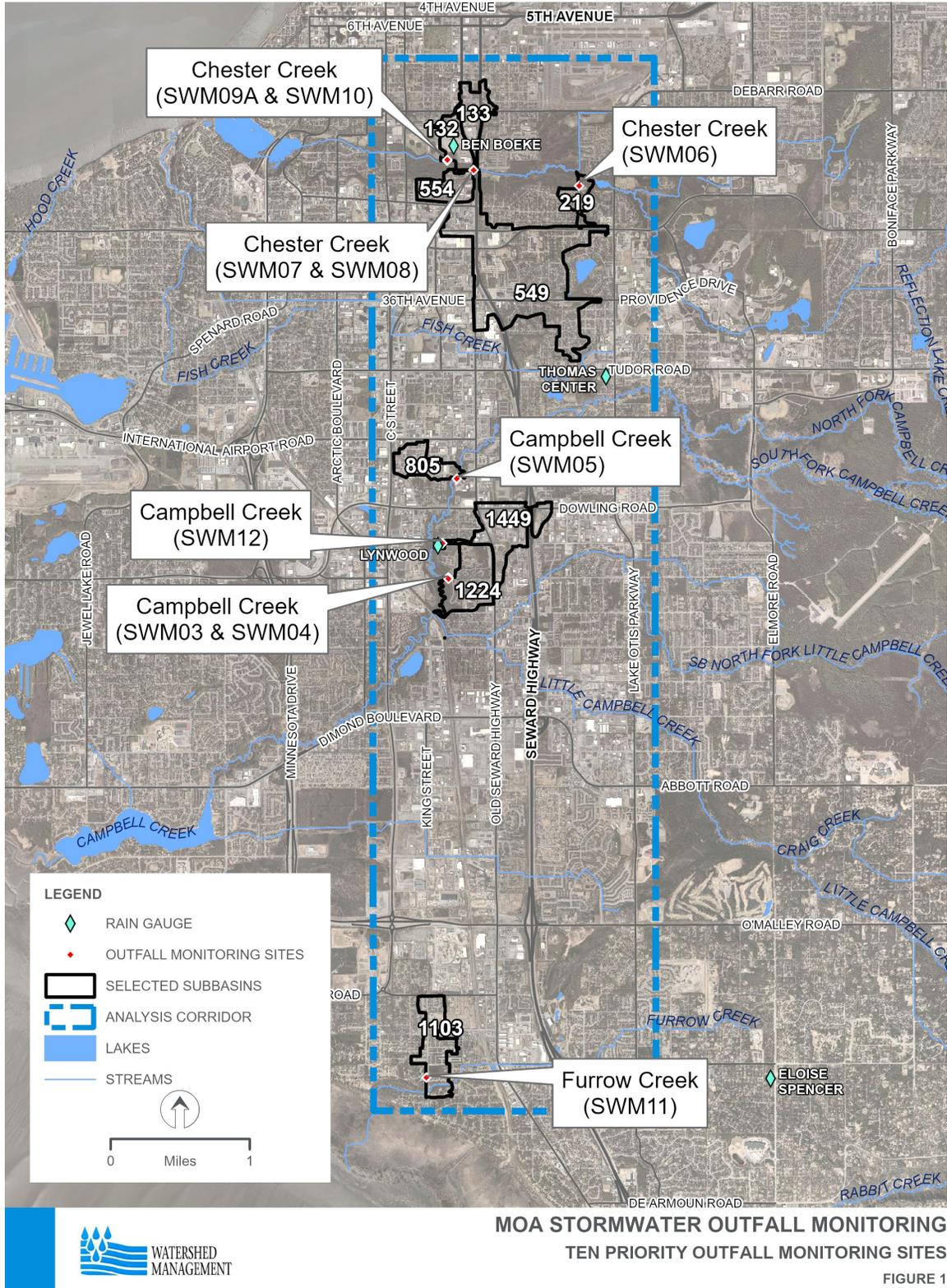


**Table 1. Outfalls Sampled Under the Stormwater Outfall Monitoring Program, 2011 – 2025.**

Station ID	Subbasin ID	Outfall Node ID	Watershed	Contributing Land Use	OGS Present	Priority Rank <sup>a</sup>	Latitude	Longitude	Outfall Diameter (in.)	Subbasin Area (acres)	Subbasin Percent Impervious
SWM01	1040b	1040-3	Little Campbell	Residential	No	10	61° 07.526'	-149° 50.196'	18	91.38	36
SWM02	1210	847-1	Little Campbell	Commercial and Industrial	No	17	61° 08.665'	-149° 50.797'	18	37.17	82
SWM03	1224a	1224-1	Campbell	Residential	Yes	3	61° 09.548'	-149° 52.443'	36	92.78	70
SWM04	1224b	1224-2	Campbell	Residential	Yes	6	61° 09.545'	-149° 52.451'	20	20.1	32
SWM05	805	207-1	Campbell	Commercial and Industrial	Yes	1	61° 10.202'	-149° 52.326'	32	58.34	75
SWM06	219	314-22	Chester	Residential	Yes	2	61° 11.996'	-149° 50.750'	24	33.81	37
SWM07	507	484-1	Chester	Commercial and Industrial	No	8	61° 12.100'	-149° 52.114'	24	51.93	89
SWM08	549	86-1	Chester	Mixed	No	6	61° 12.095'	-149° 52.114'	42	354.62	69
SWM09	132	499-1	Chester	Commercial and Industrial	Yes	4	61° 12.176'	-149° 52.554'	24	40.04	54
SWM09A	132	499-1	Chester	Commercial and Industrial	Yes	4	61° 12.159'	-149° 52.448'	24	42.63	79
SWM10	554	525-2	Chester	Mixed	No	5	61° 12.161'	-149° 52.486'	24	47.51	75
SWM11	1103	348-3	Furrow	Residential	No	-	61° 06.448'	-149° 52.734'	36	86.32	39
SWM12	1449	1454-1	Campbell	Commercial and Industrial	No	-	61° 09.758'	-149° 52.525'	24	111.68	60

Note: Stations highlighted in red were sampled from 2011 through 2016. Stations highlighted in yellow were added to the SWM Program in 2017 to replace SWM01 and SWM02. SWM09, highlighted in blue, was replaced by SWM09A in 2022.

<sup>a</sup> MOA 2011



**Figure 1. Overview Map of Outfall Monitoring Sites and Subbasins.**  
Detailed maps of each subbasin are provided in Appendix A.



## 2.2 Measured Parameters

Monitoring of the selected outfalls includes both *insitu* measurements and discrete grab samples submitted for laboratory analyses. Table 2 lists parameters measured under the MS4 SWM Program, including sample type, measurement type, analysis method, and purpose of monitoring. Measurement quality objectives for each parameter including precision, accuracy, sensitivity, and measurement range are included in the QAP. In addition to the parameters listed in Table 2, field observations are recorded at each outfall including evidence of oily sheen, scum, odor, detritus, floating material, water color and clarity, deposits or stains, vegetation, and other pertinent observations.

**Table 2. Sample Type, Measurement Type, and Method of Analysis for Measured Parameters.**

Parameter	Sample Type <sup>a</sup>	Measurement Type	Analysis Method	Purpose
Flow	IR	Field	Flow meter, or bucket	Characterize flow & loading
Specific Conductivity	IR	Field	EPA 120.1/YSI Professional Plus/ YSI ProQuatro/ YSI ProDSS	Stormwater quality
Dissolved Oxygen (DO)	IR	Field	EPA 360.1/YSI Professional Plus/ YSI ProQuatro/ YSI ProDSS	Stormwater quality
pH	IR	Field	EPA 150.2/YSI Professional Plus/ YSI ProQuatro/ YSI ProDSS	Stormwater quality
Temperature	IR	Field	SM2550B/ YSI Professional Plus/ YSI ProQuatro/ YSI ProDSS	Stormwater quality
Turbidity	IR/G	Field	EPA 180.1/ Hach 2100	Stormwater quality
5-Day Biochemical Oxygen Demand (BOD <sub>5</sub> )	G	Laboratory	SM 5210 B	Stormwater quality
Fecal Coliform	G	Laboratory	SM 9222D	Stormwater quality & loading
Total Suspended Solids (TSS)	G	Laboratory	SM 2540D	Stormwater quality
Total Aromatic Hydrocarbons (TAH)	G	Laboratory	EPA 624	Stormwater quality & loading
Total Aqueous Hydrocarbons (TAqH)	G	Laboratory	EPA 625 + EPA 624	Stormwater quality & loading
Dissolved Copper <sup>b</sup>	G	Laboratory	EPA 200.8	Stormwater quality
Total Hardness <sup>b</sup>	G	Laboratory	EPA 200.8	Stormwater quality

<sup>a</sup> IR = instantaneous recording of field analysis; G = grab sample for analysis

<sup>b</sup> Dissolved copper and total hardness were added to the SWM Program in 2016.

Table 3 identifies the parameters monitored at each selected outfall. Only samples from outfalls located in predominantly commercial and industrial land use areas are analyzed for hydrocarbon



concentrations. This includes measurements of total aromatic hydrocarbons (TAH) and polycyclic aromatic hydrocarbons (PAH), which provide the basis for calculation of total aqueous hydrocarbons (TAqH). Outfalls with watersheds dominated by commercial and industrial land uses are those most likely to contribute petroleum hydrocarbon pollutants to receiving waters. To assess the effectiveness of existing BMPs in improving stormwater quality and reducing petroleum hydrocarbon concentrations, the SWM Program samples two outfalls within commercial and industrial subbasins that contain OGS systems, and two that do not have OGS systems.

**Table 3. Parameters Measured at Each Selected Outfall.**

Station ID	Watershed	Contributing Land Use	OGS Present?	Field Parameters						Lab Samples						
				Flow	Conductivity	pH	Temperature	DO	Turbidity	BOD <sub>5</sub>	Fecal Coliform	TSS	Hardness	Dissolved Cu	TAH	PAH
SWM03	Campbell	Residential	Yes	x	x	x	x	x	x	x	x	x	x	x		
SWM04	Campbell	Residential	Yes	x	x	x	x	x	x	x	x	x	x	x		
SWM05	Campbell	Commercial and Industrial	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x
SWM06	Chester	Residential	Yes	x	x	x	x	x	x	x	x	x	x	x		
SWM07	Chester	Commercial and Industrial	No	x	x	x	x	x	x	x	x	x	x	x	x	x
SWM08	Chester	Mixed	No	x	x	x	x	x	x	x	x	x	x	x		
SWM09A	Chester	Commercial and Industrial	Yes	x	x	x	x	x	x	x	x	x	x	x	x	x
SWM10	Chester	Mixed	No	x	x	x	x	x	x	x	x	x	x	x		
SWM11	Furrow	Residential	No	x	x	x	x	x	x	x	x	x	x	x		
SWM12	Campbell	Commercial and Industrial	No	x	x	x	x	x	x	x	x	x	x	x	x	x

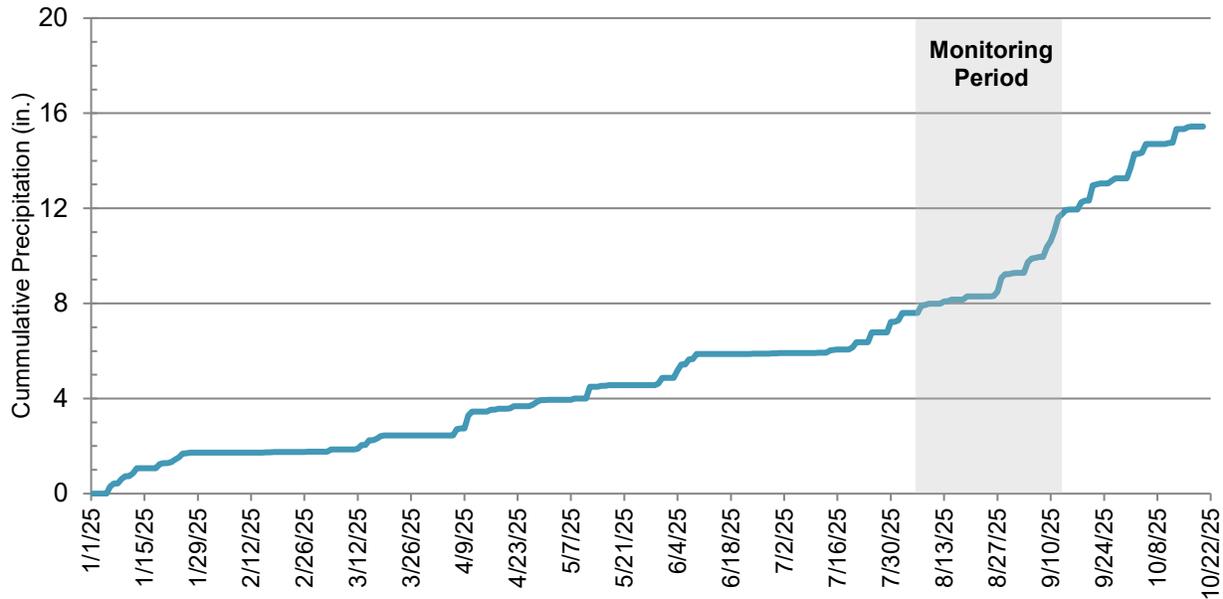
\* DO = dissolved oxygen; BOD<sub>5</sub>: 5-day biochemical oxygen demand; TSS: total suspended solids; TAH: total aromatic hydrocarbons; TAqH: total aqueous hydrocarbons

## 2.3 Precipitation

The SWM Program measures pollutants and pollutant indicators in stormwater at the 10 selected outfalls four times each summer. Sampling events are triggered by storms that generate 0.1 inches of precipitation or greater in 24 hours and are preceded by a period of 24 hours with less than 0.1 inches of precipitation. Rainfall at the National Weather Service (NWS 2025a) mesonet KTUU-midtown weather station was monitored to determine whether a rainfall event provided sufficient precipitation to trigger a sampling event. This weather station is centrally located in the monitoring corridor and provides a good representation of active precipitation that would produce runoff at all ten sites. The weather station website updates every five minutes with the latest precipitation amount and displays 72-hours' worth of data with a 24-hour running precipitation total.

Four stormwater outfall monitoring events were conducted in 2025 as required by the MS4 permit. The 2025 monitoring period began on August 7 and concluded on September 11. Sampling events took place on August 7, August 28, September 5, and September 11. Approximately 7.23 inches of precipitation (including snow, reported as water equivalent) had been measured in 2025 at the

National Oceanic and Atmospheric Administration (NOAA) National Weather Service Station located at TSAIA (PANC) before the first event was sampled. The PANC weather station has the longest record of measurements for the Anchorage Bowl and is considered the official station for the MOA. While not located in the monitoring corridor and not used to trigger individual monitoring events, the PANC weather station provides the best available data record for analyzing long-term trends. The monitoring period is shown in conjunction with the cumulative annual precipitation recorded at the PANC weather station in Figure 2.



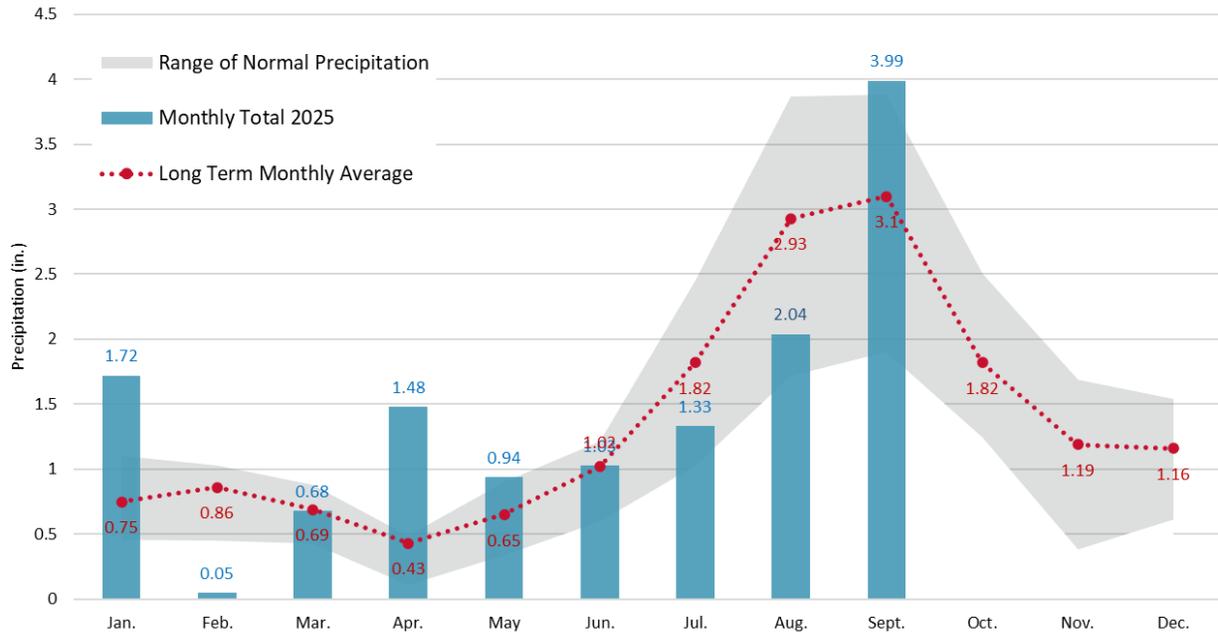
Source: NOAA 2025

**Figure 2. 2025 Monitoring Period and Cumulative Precipitation (in. of Water) at the PANC Weather Station.**

The 2025 Anchorage Bowl precipitation pattern at the PANC weather station was generally consistent with long-term trends, with lower cumulative precipitation observed during the first half of the year followed by increased precipitation during mid to late summer. From January through June, cumulative precipitation increased gradually, reflecting relatively dry conditions compared to historical averages. Beginning in July, precipitation accumulation increased more rapidly, with notable increases through August and September. Total cumulative precipitation from January through September 2025 was 13.26 inches, which is slightly higher than the long-term cumulative average of 12.25 inches for the same period.

During the 2025 SWM Program sampling period, monthly precipitation varied relative to long-term monthly averages. February and March were drier than average, with February receiving 0.05 inches compared to the long-term average of 0.86 inches, and March receiving 0.68 inches compared to 0.69 inches. However, April recorded above average precipitation at 1.48 inches compared to the long-term average of 0.43 inches and May recorded above average precipitation at 0.94 inches compared to long term average of 0.65 inches. Conversely, July and August experienced above-average precipitation. July recorded 1.33 inches compared to the long-term average of 1.82 inches, August recorded 2.04 inches compared to 2.93 inches, and September recorded the highest monthly total at 3.99 inches, exceeding the long-term average of 3.10 inches.

The highest monthly precipitation during the monitoring period occurred in September, contributing to the elevated cumulative precipitation observed during late summer and early fall.



**Figure 3. 2025 Monthly Precipitation Measured at the PANC Weather Station Compared to Historic Trends.**

*Note: Normal range of precipitation shown is the range between the 25th and 75th percentiles of monthly precipitation averages recorded at the PANC weather station for the 30-year period from 1991 to 2020. Source: NOAA 2020 and NWS 2025b.*

Four tipping bucket rain gauges installed within the monitoring area recorded precipitation throughout the monitoring period. The rain gauges were located along the monitoring corridor to provide a representation of the actual rainfall within the sampled subbasins. During precipitation events, the collection bucket in the gauge collects precipitation until it reaches the equivalent of 0.01 inch of precipitation whereupon the bucket tips, triggering a reed switch and recording an event with a time stamp. These events are stored in a data logger and downloaded into a computer program where they are summarized over different time intervals or graphed as a time series. The gauges were located at the Ben Boeke Indoor Ice Arena (“Ben Boeke”), near Lake Otis Parkway and Tudor Road (“Thomas”), at the Lynwood Retention Basin at SWM12 (“Lynwood”), and in South Anchorage near Elmore and Huffman Roads (“Eloise Spencer”) and represent the northern (i.e., Ben Boeke), middle (i.e., Thomas and Lynwood), and southern (i.e., Eloise Spencer) portions of the study area, respectively. The Thomas rain gauge experienced a battery failure at an unknown point after installation and was reinstalled in late July prior to first sampling event in August. Therefore, precipitation records for Thomas station begin on August 1, 2025. For all other stations, data collection began on July 1, 2025. The locations of the rain gauges installed in 2025 are shown on Figure 1. Daily rainfall records for the rain gauges are shown in Figure 4 and Figure 5.

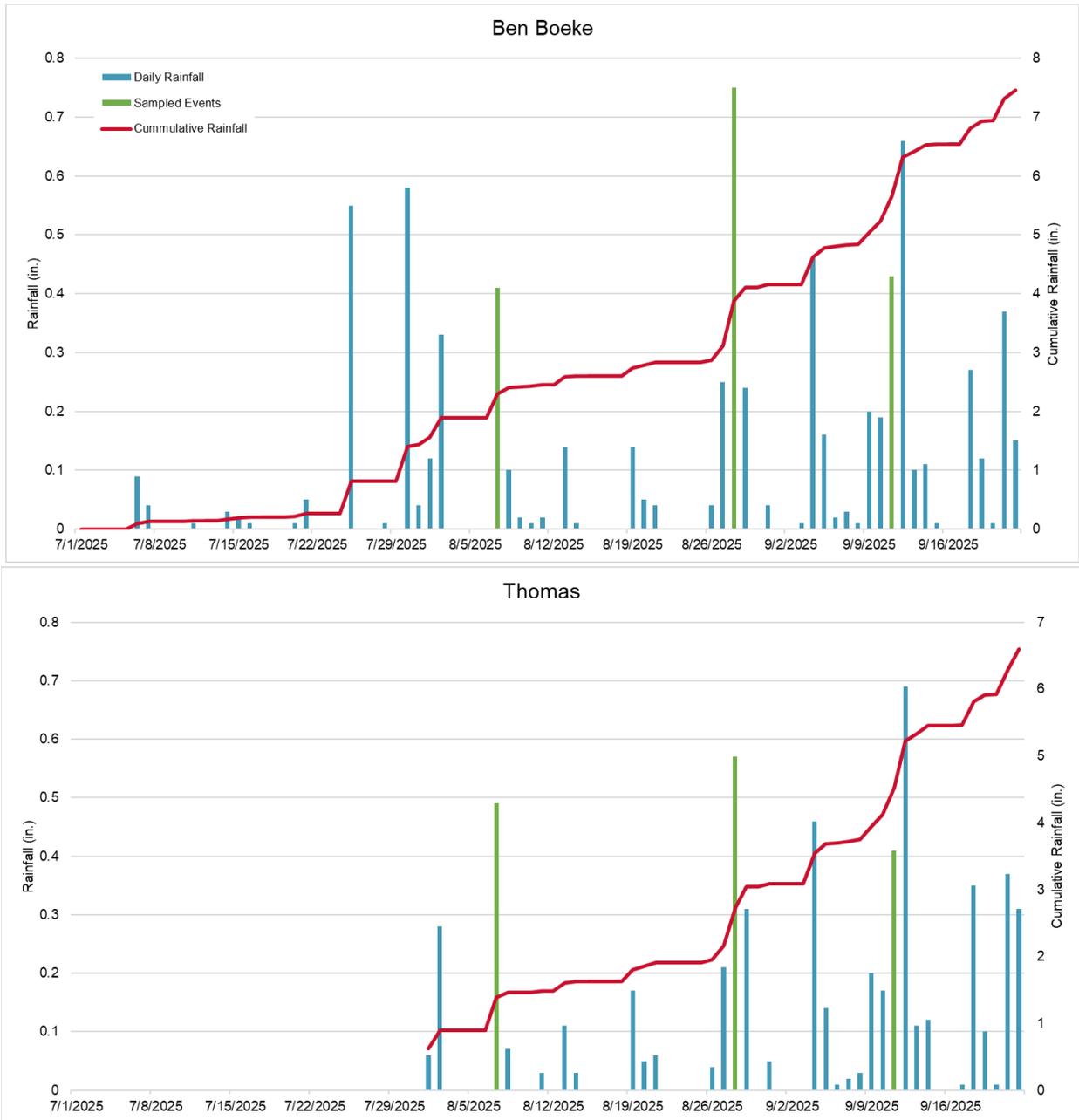
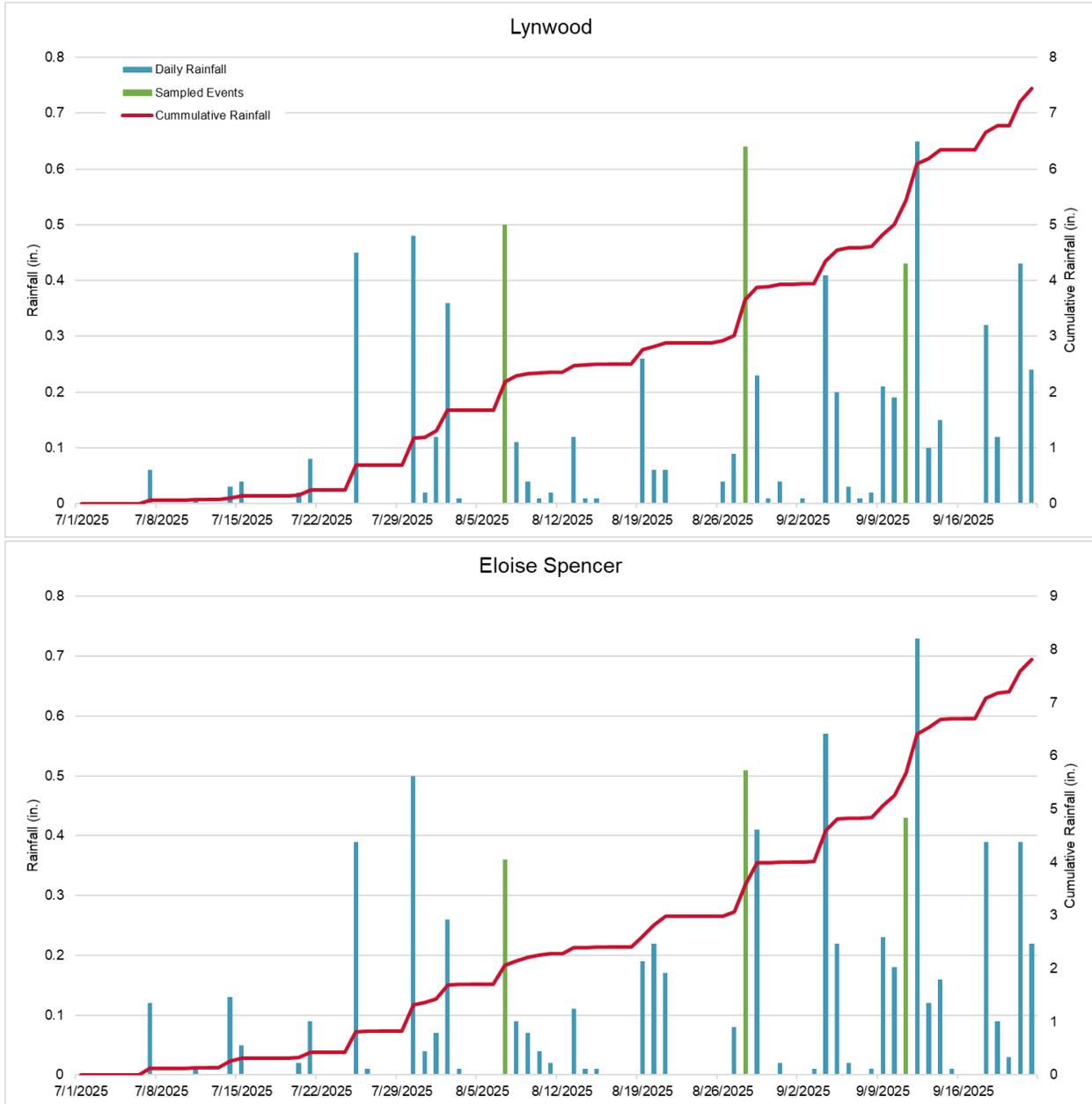


Figure 4. Rainfall Measured at the Ben Boeke and Thomas Rain Gauges by Calendar Day.



**Figure 5. Rainfall Measured at the Lynwood and Eloise Spencer Rain Gauges by Calendar Day.**

Actual rainfall during a single storm event can vary in different locations across the Anchorage Bowl. As in previous years, rainfall data from the PANC weather station were used to supplement data collected at the rain gauges to provide a time series of rainfall prior to and during the sampled storm events. However, these values can vary from the KTUU-midtown weather station, which is used to determine whether a rainfall event provides sufficient precipitation to trigger a sampling event. The KTUU-midtown weather station only keeps a rolling 72-hour record of data. Therefore, rain gauge and PANC rainfall data for each sampling event is presented on a calendar-day basis in Table 4 and demonstrates considerable variability in the geospatial distribution of precipitation throughout the monitoring corridor.

The QAP defines storm events on a 24-hour storm basis, rather than a calendar-day basis, as storms often commence in the late evening. All four storm events met the criteria of exhibiting greater than 0.1 inch of rain in 24 hours. Sampling for each storm event was completed within 24 hours from the start of a storm. Precipitation recorded at the four rain gauges during the preceding 24-hour period were less than 0.1 inches for all four events. Based on these findings, all four sampled storms met the storm event criteria. Table 5 presents rainfall data for each sampling event on a storm rolling accumulation basis (as opposed to a 24-hour or calendar day basis).

## 2.4 Sampling Events

The first storm event sampled as part of the 2025 SWM Program occurred on August 7 (Event 1). Storm precipitation began at approximately 04:26 on August 7 and ended at approximately 14:25 on August 7, resulting in a storm duration of approximately 10 hours. Sampling was initiated at 07:05 and completed at 10:15, approximately three hours after storm onset. Rainfall during the storm period was measured between 0.36 and 0.48 inches across the monitoring corridor, based on rolling accumulation recorded across the monitoring corridor. No precipitation was recorded during the 24 hours preceding the storm period. This event represented a relatively short-duration storm with relatively low total precipitation during the 2025 sampling season.

The second sampled storm event occurred on August 28 (Event 2). Storm precipitation began at approximately 19:37 on August 27 and ended approximately at 09:59 on August 28, resulting in a storm duration of approximately 14 hours. Sampling was initiated at 08:03 and completed at 12:15 on August 28, after the storm had been ongoing overnight. Rain gauges recorded between 0.29 and 0.67 inches of rainfall during the storm period across the monitoring corridor. Preceding 24-hour rainfall totals ranged from 0.01 to 0.07 inches. Overall, this event produced a moderate amount of precipitation over a moderate storm duration relative to other sampled storms in 2025.

The third sampled storm event occurred on September 5 (Event 3). Storm precipitation began at approximately 17:09 on September 4 and ended at approximately 10:07 on September 5, resulting in a storm duration of approximately 17 hours. Sampling was initiated at 07:35 and completed at 10:59 on September 5, near the end of the storm period. Rainfall measured during the 24-hour storm period ranged from 0.60 to 0.79 inches across the monitoring corridor. No precipitation was recorded during the 24 hours preceding the storm. This event represented one of the higher rainfall totals observed during the 2025 sampling season.

The fourth sampled storm event occurred on September 11 (Event 4). Storm precipitation began at approximately 18:14 on September 10 and ended at approximately 14:39 on September 11, resulting in a storm duration of approximately 20 hours. Sampling was initiated at 07:40 and completed at 10:50 on September 11, during the latter portion of the storm period. Rainfall during the 24-hour storm period ranged from 0.48 to 0.54 inches across the monitoring corridor, while minimal precipitation (0.00 to 0.02 inches) was recorded during the preceding 24 hours. This event represented a moderate precipitation event occurred over an extended storm duration.

In general, the storms sampled in 2025 exhibited variability in both rainfall totals and storm durations. When comparing the sampled events, Event 3 had the highest total rainfall and one of the longest storm durations, while Event 1 had the lowest total rainfall and shortest duration. Storm duration and total precipitation were used to qualitatively evaluate relative storm intensity by calculating average rainfall rates over the storm period. Using this approach, events with shorter



durations and comparable rainfall totals represent relatively higher average intensities, whereas longer-duration storms reflect lower average intensities distributed over time. This qualitative comparison is appropriate for evaluating storm characteristics relevant to stormwater sampling; however, it does not represent peak or short-duration rainfall intensity, nor does it include comparisons to long-term average precipitation or drainage area normalized response. Differences in storm duration and average intensity are therefore considered when interpreting observed variability in stormwater flow and water quality conditions.



**Table 4. Precipitation Recorded During and Prior to Sampling Events (Measured by Calendar Day).**

	Date	PANC Airport	Ben Boeke	Thomas	Lynwood	Eloise Spencer
		(in.)	(in.)	(in.)	(in.)	(in.)
	7/31/2025	0.01	0.04	0.02	0.02	0.04
	8/1/2025	0.06	0.12	0.06	0.12	0.07
	8/2/2025	0.31	0.33	0.28	0.36	0.26
	8/3/2025	0	0	0	0.01	0.01
	8/4/2025	0	0	0	0	0
	8/5/2025	0	0	0	0	0
	8/6/2025	0	0	0	0	0
<b>Event 1</b>	8/7/2025	0.31	0.41	0.49	0.50	0.36
	=					
	8/21/2025	0	0.04	0.06	0.06	0.17
	8/22/2025	0	0	0	0	0
	8/23/2025	0	0	0	0	0
	8/24/2025	0	0	0	0	0
	8/25/2025	0	0	0	0	0
	8/26/2025	0.02	0.04	0.04	0.04	0
	8/27/2025	0.19	0.25	0.21	0.09	0.08
<b>Event 2</b>	8/28/2025	0.57	0.75	0.57	0.64	0.51
	=					
	8/29/2025	0.16	0.24	0.31	0.23	0.41
	8/30/2025	0	0	0	0.01	0
	8/31/2025	0.04	0.04	0.05	0.04	0.02
	9/1/2025	0.01	0	0	0	0
	9/2/2025	0	0	0	0.01	0
	9/3/2025	0	0.01	0	0	0.01
	9/4/2025	0.45	0.46	0.46	0.41	0.57
<b>Event 3</b>	9/5/2025	0.16	0.16	0.14	0.20	0.22
	=					
	9/4/2025	0.45	0.46	0.46	0.41	0.57
	9/5/2025	0.16	0.16	0.14	0.2	0.22
	9/6/2025	0.03	0.02	0.01	0.03	0.02
	9/7/2025	0.03	0.03	0.02	0.01	0
	9/8/2025	0	0.01	0.03	0.02	0.01
	9/9/2025	0.42	0.2	0.2	0.21	0.23
	9/10/2025	0.25	0.19	0.17	0.19	0.18
<b>Event 4</b>	9/11/2025	0.43	0.43	0.41	0.43	0.43



**Table 5. Precipitation Data for Each Sampling Event Presented on Rolling Accumulation.**

	Conclusion of Sampling	Time Period	Time Period Range	Rainfall Measured (Inches)			
				Ben Boeke	Thomas	Lynwood	Elosie Spencer
		Preceding 24 hours	04:26 8/06 to 04:25 8/07	0.00	0.00	0.00	0.00
<b>Event 1</b>	<b>8/07/25 at 10:15</b>	<b>Storm Period</b>	<b>04:26 8/07 to 14:25 8/07</b>	<b>0.41</b>	<b>0.47</b>	<b>0.48</b>	<b>0.36</b>
		Preceding 24 hours	19:37 8/26 to 19:36 8/27	0.07	0.07	0.04	0.01
<b>Event 2</b>	<b>8/28/25 at 12:15</b>	<b>Storm Period</b>	<b>19:37 8/27 to 09:59 8/28</b>	<b>0.67</b>	<b>0.38</b>	<b>0.29</b>	<b>0.37</b>
		Preceding 24 hours	17:09 9/03 to 17:08 9/04	0.00	0.00	0.00	0.00
<b>Event 3</b>	<b>9/05/25 at 10:59</b>	<b>24 Hour Storm Period</b>	<b>17:09 9/04 to 10:07 9/05</b>	<b>0.62</b>	<b>0.60</b>	<b>0.61</b>	<b>0.79</b>
		Preceding 24 hours	18:14 9/09 to 18:13 9/10	0.01	0.01	0.00	0.02
<b>Event 4</b>	<b>9/11/25 at 10:50</b>	<b>24 Hour Storm Period</b>	<b>18:14 9/10 to 14:39 9/11</b>	<b>0.54</b>	<b>0.48</b>	<b>0.50</b>	<b>0.48</b>

Sampling procedures were carried out in accordance with the methodology outlined in the QAP. No changes from previous years' sampling procedures were required in 2025.

Sampling bottles were prepared before the storm season so that the field team could quickly mobilize. Bottles were labeled with station location, sample number, number of bottles, and analysis type and method. Once a storm event was identified for sampling, the field team prepared sampling equipment. Portable water quality measurement instrumentation was calibrated immediately prior to going in the field for each event per the manufacturer's recommendation as outlined in Appendix H of the QAP. Date, time, and sampler's initials were recorded on each sample bottle in the field at the time of sampling.

The field team consisted of two team members for safety and allowed separate field role designations. One team member would record the field measurements and notes while the second team member performed measurements and conducted grab sampling. Upon arrival at the outfall, the field team conducted flow measurements and placed the YSI Professional Plus multi-probe into the outfall flow to allow the probes to equilibrate for at least two minutes prior to taking measurements.

An electromagnetic velocity meter with a wading rod was used to collect flow measurements. The flow meter measures the average velocity of the outfall pipe over a twenty second period. The average velocity was used in conjunction with the water depth and pipe diameter to calculate the instantaneous flow of each outfall.

After measuring flow, the field team used the YSI multi-probe to measure DO, specific conductivity, pH, and temperature. Turbidity was measured in the field by collecting a discrete sample that was analyzed on site with a portable Hach 2100P/Q turbidimeter. Water quality measurements were obtained from the water flowing out of the end of pipe prior to any mixing within the receiving waterbody. Field measurements were recorded on project-specific field log forms that were bound in the project field logbooks along with field instrument calibration logs (refer to Appendix E).

The field team collected water samples for BOD<sub>5</sub>, TSS, fecal coliform, dissolved copper, total hardness, TAH, and PAH in pre-cleaned laboratory-provided bottles. The water quality samples were collected from the water flowing from the outfall, and extra care was taken not to disturb accumulated sediment in the outfall pipe when collecting a water sample. To avoid having to perform decontamination procedures, all samples, with the exception of TAH, were collected directly into their respective sample containers. In the case of TAH, the sample was first collected into a pre-cleaned and certified 250-milliliter (mL) PAH bottle that was then used to carefully fill the 40-milliliter (mL) vials for TAH analyses. The PAH bottle was then topped off with additional water from the outfall discharge. Since the PAH bottles were pre-cleaned and certified, it was unnecessary to perform equipment rinsate analyses. Once the water samples were collected, the field team recorded visual observations at each outfall location.

The field team conducted replicate field measurements and laboratory analyses at a rate of 15 percent (%) per sampling event. This resulted in replicate field measurements being taken at two monitoring sites per sampling event for all parameters except TAH and PAH. TAH and PAH required one replicate field measurement since these samples are collected at fewer outfalls. TAH analyses also included a trip blank sample, provided by the laboratory, that accompanied the sample bottles in the field. Additional water for BOD<sub>5</sub>, TSS, dissolved copper, TAH, and PAH was collected at one station to allow the laboratory to perform matrix spike/matrix spike duplicate (MS/MSD) analyses.

## 2.5 Sampling Handling and Chain of Custody Procedures

Samples for BOD<sub>5</sub>, TSS, fecal coliform, dissolved copper, total hardness, TAH, and PAH were collected, preserved, and cooled for delivery to the laboratory as described in the QAP. Alaska Water Laboratories (AWL) is located in Wasilla and no special sample shipping or packaging was required. Upon sample collection, all samples were kept chilled to 4°C ± 2°C with gel ice and delivered to the AWL laboratory by the field team following the sample collection effort. AWL was in custody of the samples as they were processed, and some sample bottles moved to subsidiary laboratories. All samples were transferred to the laboratories under chain of custody (COC) procedures as outlined in the QAP. Copies of completed COCs are included with the laboratory data reports in Appendix C.

## 2.6 Laboratory Analyses

The water quality constituents selected for the SWM Program were established based upon the requirements of the MS4 permit. Laboratory analyses were conducted by AWL and subcontracted laboratories, which are certified to conduct such analyses. Analytical methods (refer to Table 2) were based on approved EPA methodology and included all necessary QA/QC procedures and analyses as outlined in the QAP.

The laboratory QA/QC activities provide information needed to assess potential laboratory contamination, analytical precision and accuracy, and representativeness. Analytical quality assurance for the SWM Program included:

- Employing analytical chemists trained in the required procedures and analytical methods
- Adherence to documented procedures, EPA methods, and laboratory standard operating procedures
- Calibration of analytical instruments
- Use of quality control samples, internal standards, surrogates, and standard reference materials (SRMs)
- Documentation of sample tracking and analysis

Internal laboratory control checks included the use of internal standards, method blanks, MS/MSDs, duplicates, laboratory control spikes and duplicates (LCS/LCSD), and SRMs as required by the sample analysis methodology. For additional details on laboratory QA/QC procedures, refer to the QAP.

## 2.7 Deviation from the QAP

There were no deviations from the QAP during the 2025 monitoring year with respect to field sampling procedures, sample handling, sample chain of custody, laboratory analysis, QA/QC, and data validation.

## 2.8 QA/QC and Data Validation

QA/QC procedures were followed according to the QAP. The procedures included analytical checks (field replicates, trip blanks, MS/MSDs); instrument calibration; and procedures to assess data for precision, accuracy, representativeness, comparability, and completeness.

Verification analyses for laboratory parameters were conducted by AWL. The data review focused on criteria for the following QA and QC parameters and their overall effects on the data:

- Sample handling (chain of custody)
- Temperature blank
- Holding time compliance
- MS/MSD and LCS/LCSD results
- Field replicate comparison
- Data validation

AWL and its subsidiary laboratories are certified by the EPA and the Alaska Drinking Water Program and have an approved QA/QC program. Analytical methods and testing procedures were in adherence with EPA-approved protocols and guidelines. The analyses for the fecal coliform, BOD<sub>5</sub>, TSS, dissolved copper, total hardness, PAH, and TAH were reported with appropriate method detection limits and report detection limits.

Sample custody was maintained for the samples. The coolers transporting the samples remained at ambient temperatures or were cooled to 4°C ± 2°C before being delivered to the laboratory within a few hours of each sampling event.

The QA/QC officer validated data reported by the laboratory. Data that was determined to be either biased low or high was flagged based on low or high recovery rates from laboratory control samples. Data that was considered suspicious was also flagged and, in some cases rejected. For a more detailed summary of field and laboratory data validation results, refer to Appendix D. Other QA/QC procedures in 2025 included the requirement that all field team members read the QAP. Each team consisted of one ADEC-qualified sampler and one sampler in training. The field team was also required to QC data at the end of each event to determine all data were collected and sampling information was complete.

## 3.0 Results and Discussion

### 3.1 Field Measurements

*In situ* field measurements taken as part of the 2025 SWM Program are presented in Figure 6 through Figure 11 and in Table 6. Reported measurements include flow, turbidity, DO, conductivity, pH, and temperature. Where relevant, *in situ* measurements are compared against Alaska Water Quality Standard (AWQS) benchmarks (refer to Table 9 for AWQS benchmarks used for comparisons). It should be noted that these AWQS benchmarks apply to the receiving waters and should be considered for comparison purposes only when reviewing stormwater.

Outfall flow rates are reported in Figure 6 and in Table 6. The flow rates were variable between sites and storm events, reflecting both the range in subbasin characteristics as well as the spatial and temporal variability of precipitation throughout the monitoring corridor. Outfall SWM08 had the highest mean flow rate (4.23 cubic feet per second (CFS)), as well as the maximum measured flow rate (7.48 CFS during Storm 1) of the 10 outfalls observed during this year's program. Outfall SWM04 had the lowest mean flow rate (0.03 CFS) of the outfalls sampled and SWM06 had the lowest measured flow rate (less than 0.01 CFS during Storm 3) of the 10 outfalls observed. Storm 4 had the highest precipitation intensity, nine of ten outfalls exhibited their highest flow during this event. In contrast, Storm 3 had the lowest total precipitation, and six of the ten outfalls exhibited their lowest flows during Storm 3.

Measured turbidity levels are reported in Figure 7 and Table 6. Like flow rates, turbidity levels were variable between storms and across the monitoring corridor, with some outfalls demonstrating consistently low turbidity readings while others exhibited spikes in turbidity during one or more of the sampling events. Mean turbidity levels recorded during this year's program exceeded 50 Nephelometric Turbidity Units (NTU) at outfalls SWM07, SWM08, SWM11, and SWM12. Outfall SWM04 had the lowest mean turbidity at 15.7 NTU. In contrast, outfall SWM07 had the highest mean turbidity at 102 NTU. The observed variability in turbidity measurements across outfalls and sampling events was expected as turbidity is highly dependent on specific drainage basin characteristics such as land use, land permeability, drainage slope, precipitation intensity, precipitation history, and other factors, all of which vary considerably site-to-site.

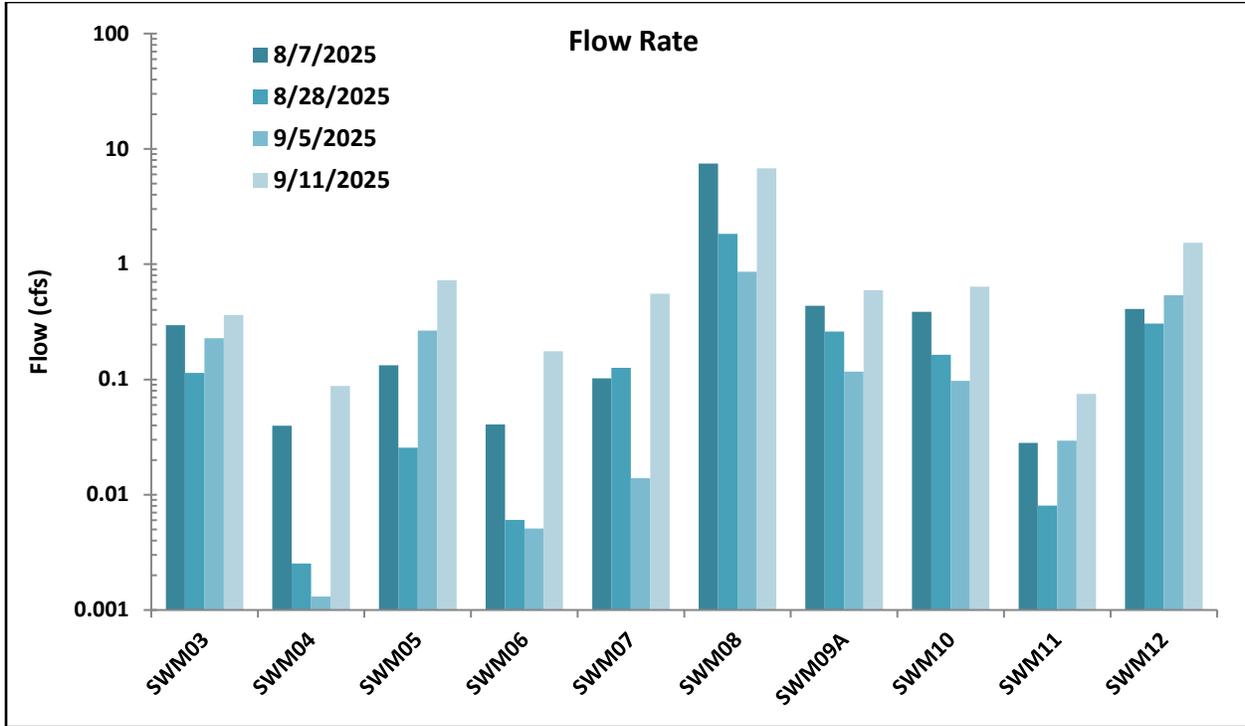


Figure 6. Flow Rates Measured at Monitoring Sites During All Four Events.

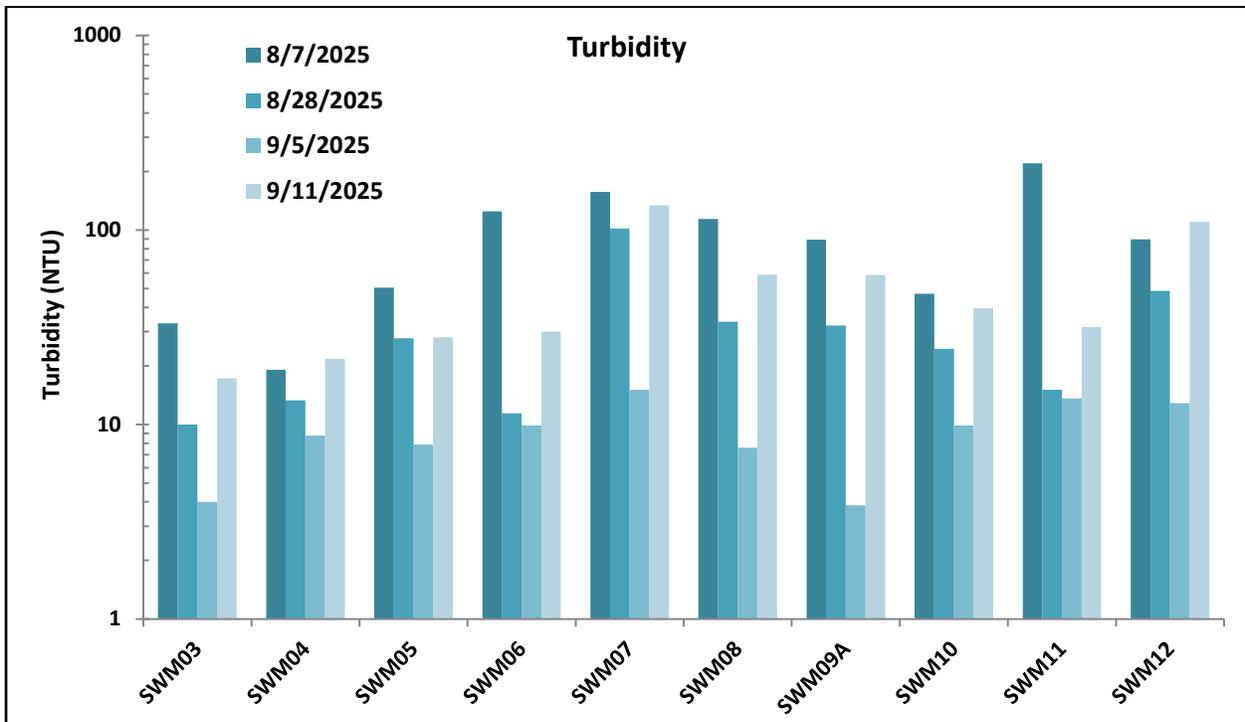


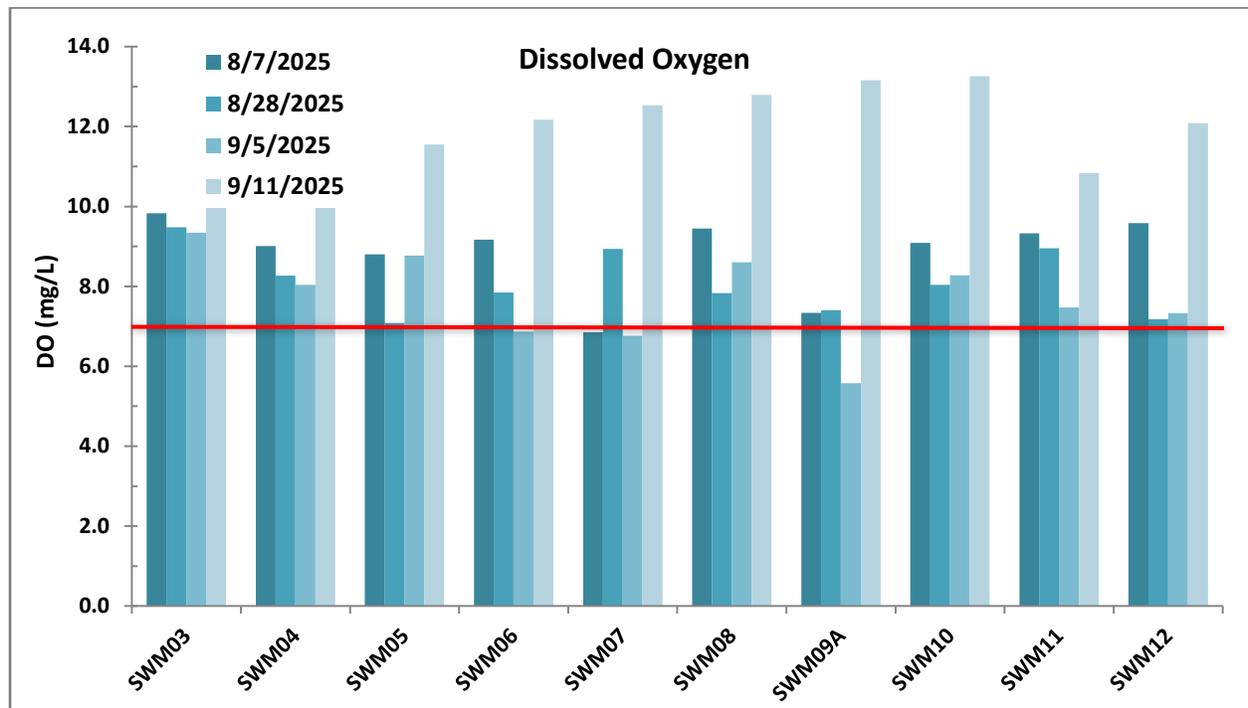
Figure 7. Turbidity Measured in Stormwater Sampled at Monitoring Sites During All Four Events.



DO levels are reported in Figure 8 and in Table 6. Outfall SWM07 during Storm 1, as well as Outfalls SWM06, SWM07, and SWM09A during Storm 3, complied with the AWQS threshold of 7 milligrams per liter (mg/L) for aquatic life (Table 10), whereas the remaining outfalls did not. Mean DO concentrations across the four sampled storm events ranged from a low of 8.37 mg/L at SWM09A to a high of 10.02 mg/L at SWM03. The highest measured DO concentration of 13.26 mg/L occurred at SWM10 during Storm 4, while the lowest measurement of 5.58 mg/L occurred at SWM09A during Storm 3.

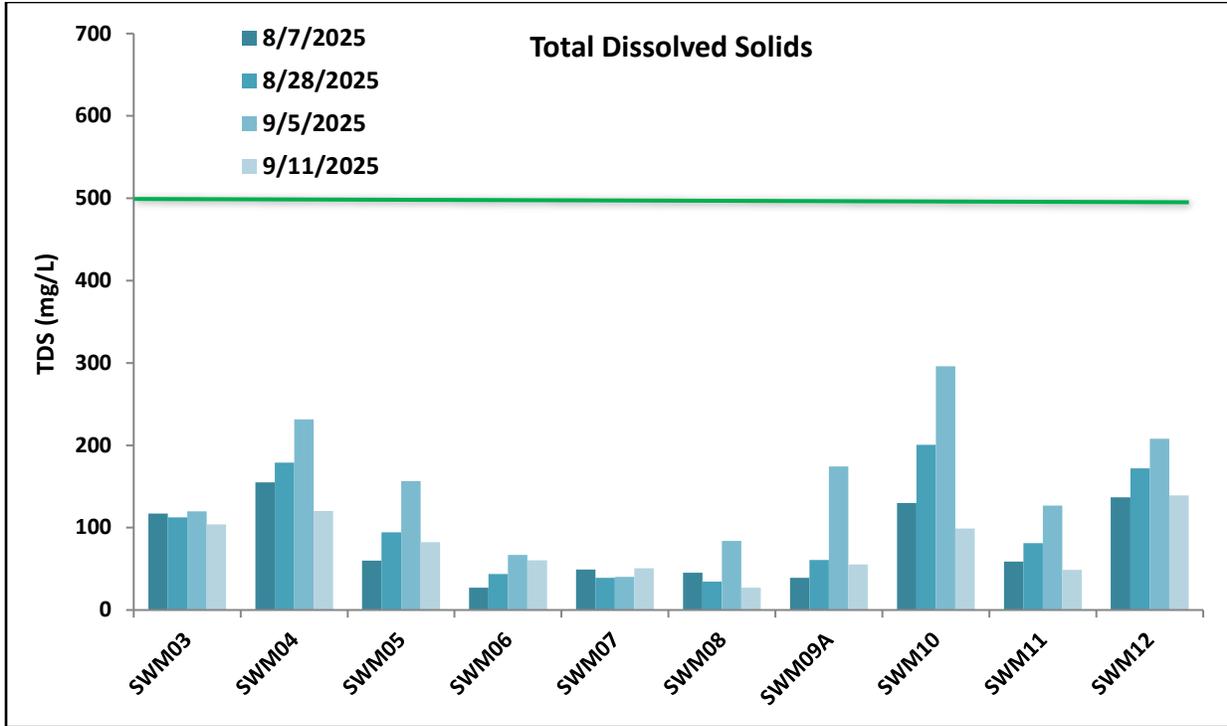
Although not required by the monitoring plan, specific conductivity was recorded at each site since it was available on the portable multi-parameter meter and is considered useful for interpretation of stormwater data. Specific conductivity was converted to total dissolved solids (TDS) concentrations so comparisons could be made with the AWQS criteria. TDS concentrations are reported in Figure 9 and in Table 6. Storm 2 and Storm 3 events had mean TDS concentrations greater than 100 mg/L, with Storm 3 having the highest mean concentration of 150.4 mg/L.

It should also be noted that although elevated TDS can be indicative of contaminants, the highest concentrations measured were below expected ranges for stormwater (EPA 1983). For 2025, none of the outfalls exceeded the most restrictive AWQS criteria of 500 mg/L (Figure 14).



Red line indicates the AWQS dissolved oxygen criteria of  $\geq 7$  mg/L.

Figure 8. Dissolved Oxygen Measured in Stormwater Sampled at Monitoring Sites During All Four Events.

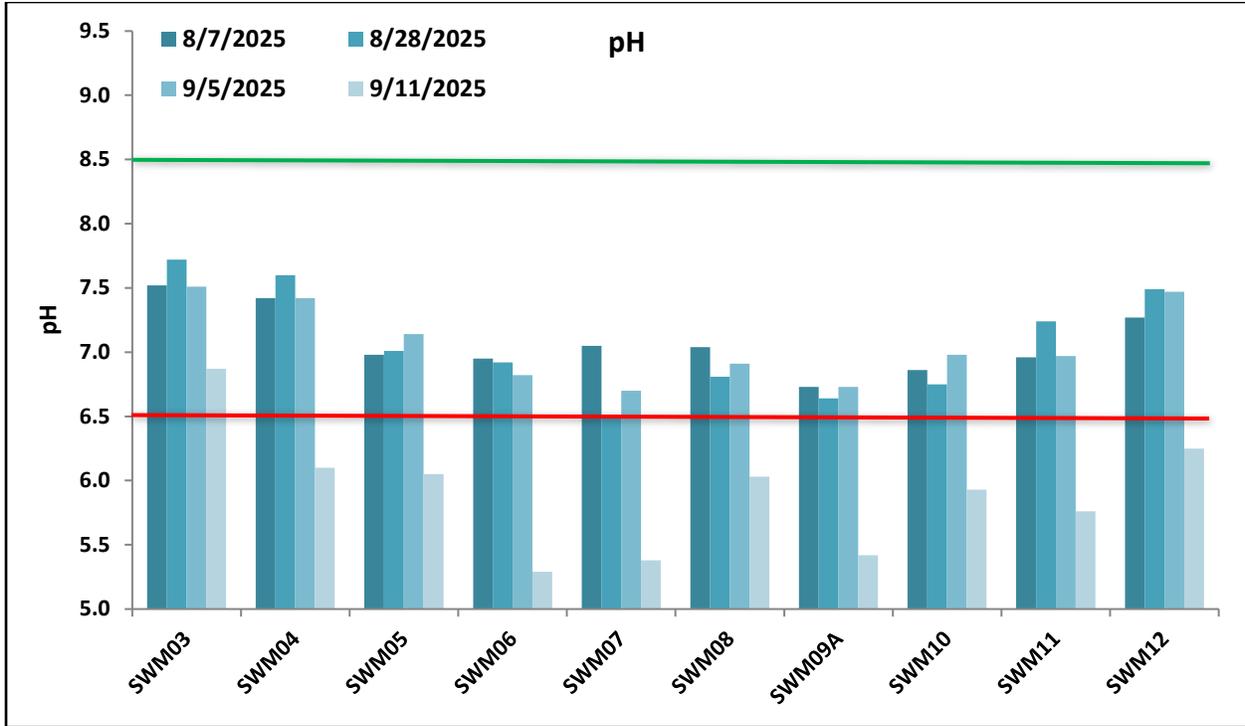


Green line indicates the AWQS total dissolved solids criteria of  $\leq 500$  mg/L.

**Figure 9. Total Dissolved Solids Measured in Stormwater Sampled at Monitoring Sites During All Four Events.**

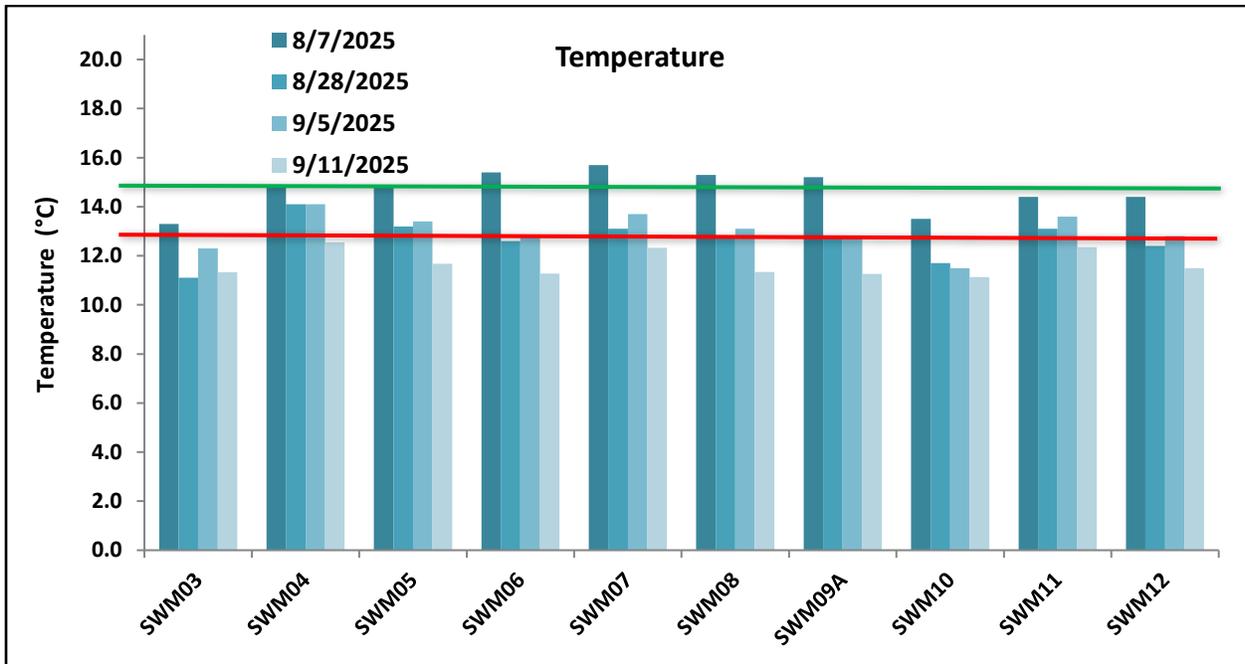
Measurements for pH are reported in Figure 10 and Table 6, and generally fall within AWQS criteria. Rainfall is often slightly acidic, and the National Atmospheric Deposition Program (NADP) indicates that rainfall in Alaska typically falls with a pH of 5.1 to 5.2 (NADP 2019). Measured pH levels during this year’s program were generally the highest at each outfall during Storm 1 and were the lowest at each outfall during Storm 4. The lowest recorded pH value occurred at SWM06 during Storm 4, and was 5.29, below the AWQS minimum guideline of 6.5 (Table 10) for the Growth and Propagation of Fish, Shellfish, other Aquatic Life and Wildlife. Nine of the ten outfalls during Storm 4 did not meet the AWQS lower limit for pH, while all other outfalls during other storm events met the AWQS lower limit for pH. The maximum observed pH value of 7.72 was recorded during Storm 2 at SWM03. No pH measurements exceeded the AWQS maximum guideline of 8.5.

Temperature measurements are reported in Figure 11 and in Table 6. Temperature generally decreased between the second and fourth monitoring event, reflecting the progressively cooler fall weather. In the measured samples, SWM03 had the lowest mean temperature (12.0 °C) while SWM04 had the highest mean temperature (14.1°C). Temperature measurements exceeded the AWQS criterion of 15°C for fish migration routes and rearing areas at outfalls SWM04, SWM05, SWM06, SWM07, SWM08, and SWM09A during Storm 1.



Green line indicates the upper AWQS pH limit of 8.5 and red line indicates the lower AWQS pH limit of 6.5.

Figure 10. pH (units) Measured in Stormwater Sampled at Monitoring Sites During All Four Events.



Green line indicates the upper AWQS limit of 15°C for migration and rearing areas and red line indicates the lower AWQS limit of 13°C for spawning and egg/fry incubation.

Figure 11. Temperature (°C) Measured in Stormwater Sampled at Monitoring Sites During All Four Events.



**Table 6. *Insitu* Parameters Measured at Monitoring Sites During All Four Sampling Events.**

Station	Storm 1 07-Aug-2025	Storm 2 28-Aug-2025	Storm 3 05-Sept-2025	Storm 4 11-Sept-2025	Mean
<b><i>Flow Rate (CFS)</i></b>					
SWM03	0.30	0.11	0.23	0.36	0.25
SWM04	0.04	0.00	0.00	0.09	0.03
SWM05	0.13	0.03	0.26	0.72	0.29
SWM06	0.04	0.01	0.01	0.18	0.06
SWM07	0.10	0.13	0.01	0.56	0.20
SWM08	7.48	1.83	0.86	6.76	4.23
SWM09A	0.43	0.26	0.12	0.59	0.35
SWM10	0.39	0.16	0.10	0.64	0.32
SWM11	0.03	0.01	0.03	0.08	0.04
SWM12	0.41	0.31	0.54	1.53	0.70
<b><i>Turbidity (NTU)</i></b>					
SWM03	33.2	10.0	4.0	17.3	16.1
SWM04	19.1	13.3	8.8	21.7	15.7
SWM05	50.6	27.8	7.9	28.1	28.6
SWM06	125.0	11.4	9.9	30.0	44.1
SWM07	157.0	102.0	15.1	134.0	102.0
SWM08	114.0	33.8	7.6	59.0	53.6
SWM09A	89.4	32.3	3.8	58.8	46.1
SWM10	47.0	24.5	9.9	39.6	30.3
SWM11	220.0	15.1	13.6	31.7	70.1
SWM12	89.6	48.6	12.9	110.0	65.3
<b><i>Dissolved Oxygen (mg/L)</i></b>					
SWM03	9.83	9.48	9.34	11.43	10.02
SWM04	9.01	8.27	8.04	12.12	9.36
SWM05	8.80	7.08	8.77	11.55	9.05
SWM06	9.17	7.85	6.87	12.17	9.02
SWM07	6.85	8.94	6.76	12.53	8.77
SWM08	9.45	7.83	8.60	12.79	9.67
SWM09	7.34	7.40	5.58	13.16	8.37
SWM10	9.09	8.04	8.28	13.26	9.67
SWM11	9.33	8.95	7.47	10.83	9.15
SWM12	9.58	7.18	7.33	12.08	9.04



Station	Storm 1 07-Aug-2025	Storm 2 28-Aug-2025	Storm 3 05-Sept-2025	Storm 4 11-Sept-2025	Mean
<b>Total Dissolved Solids (mg/L)</b>					
SWM03	117.3	112.5	119.7	104.0	113.4
SWM04	155.1	178.8	231.4	120.3	171.4
SWM05	59.9	94.3	156.5	82.6	98.3
SWM06	27.3	43.6	67.1	60.5	49.6
SWM07	49.1	39.0	40.4	50.7	44.8
SWM08	45.2	34.6	83.8	27.3	47.7
SWM09	39.3	60.9	174.5	55.3	82.5
SWM10	129.7	200.7	296.1	98.8	181.4
SWM11	58.8	81.4	126.9	48.8	79.0
SWM12	136.8	172.0	207.9	139.1	163.9
<b>pH</b>					
SWM03	7.52	7.72	7.51	6.87	7.41
SWM04	7.42	7.60	7.42	6.10	7.14
SWM05	6.98	7.01	7.14	6.05	6.80
SWM06	6.95	6.92	6.82	5.29	6.50
SWM07	7.05	6.51	6.70	5.38	6.41
SWM08	7.04	6.81	6.91	6.03	6.70
SWM09A	6.73	6.64	6.73	5.42	6.38
SWM10	6.86	6.75	6.98	5.93	6.63
SWM11	6.96	7.24	6.97	5.76	6.73
SWM12	7.27	7.49	7.47	6.25	7.12
<b>Temperature (°C)</b>					
SWM03	13.3	11.1	12.3	11.3	12.0
SWM04	15.6	14.1	14.1	12.5	14.1
SWM05	15.2	13.2	13.4	11.7	13.4
SWM06	15.4	12.6	12.8	11.3	13.0
SWM07	15.7	13.1	13.7	12.3	13.7
SWM08	15.3	12.8	13.1	11.3	13.1
SWM09A	15.2	12.7	12.7	11.3	13.0
SWM10	13.5	11.7	11.5	11.1	12.0
SWM11	14.4	13.1	13.6	12.4	13.4
SWM12	14.4	12.4	12.8	11.5	12.8



Table 7. Concentrations of Microbiological and Conventional Parameters.

Station	Storm 1 07-Aug-2025	Storm 2 28-Aug-2025	Storm 3 05-Sept-2025	Storm 4 11-Sept-2025	Mean <sup>1,2</sup>
<b>Biochemical Oxygen Demand (mg/L)</b>					
SWM03	<b>4.73Q</b>	2.35	1.53	1.79	2.6
SWM04	<b>3.61Q</b>	5.34	2.17	2.49	3.4
SWM05	<b>9.06Q</b>	6.00	5.07	3.32	5.9
SWM06	<b>6.75Q</b>	4.15	3.04	3.33	4.3
SWM07	<b>21.03Q</b>	5.9	5.51	6.1	9.6
SWM08	<b>15.63Q</b>	6.3	<b>1.97J</b>	3.76	6.9
SWM09A	<b>24.91Q</b>	4.99	<b>1.39J</b>	<b>1.46J</b>	8.2
SWM10	<b>6.39Q</b>	2.02	<b>1.47J</b>	1.89	2.9
SWM11	<b>7.14Q</b>	4.00	1.96	1.94	3.8
SWM12	<b>13.21Q</b>	6.37	<b>2.39J</b>	4.54	6.6
<b>Total Suspended Solids (mg/L)</b>					
SWM03	21.6	<b>3.55U</b>	<b>3.75U</b>	<b>9.12J</b>	9.5
SWM04	17.4	<b>9.19J</b>	81.2	<b>14.7J</b>	30.6
SWM05	41.8	<b>14.08J</b>	<b>3.73U</b>	22.54	20.5
SWM06	35	25.7	<b>13.53J</b>	20.06	23.7
SWM07	129	69.2	<b>8.8J</b>	178.80	96.6
SWM08	127	33.0	<b>3.08U</b>	67.50	57.7
SWM09A	80	26.0	<b>2.8U</b>	55.40	41.0
SWM10	42	<b>3.95U</b>	<b>4.1U</b>	36.36	21.7
SWM11	373	65.6	<b>3.85U</b>	<b>16.8J</b>	114.8
SWM12	68	23.0	<b>5U</b>	63.43	39.8
<b>Fecal Coliform (FC/100 mL)</b>					
SWM03	2,200	470	200	7,600	1,120
SWM04	955	3,800	380	5,100	1,628
SWM05	3,700	5,500	636	3,800	2,649
SWM06	590	782	109	1,073	482
SWM07	836	1,909	200	2,200	916
SWM08	1,800	11,300	2,100	11,545	4,712
SWM09A	618	4,800	<b>45.46U</b>	3,400	823
SWM10	240	31,000	182	36	471
SWM11	1,291	1,564	250	1,409	918
SWM12	9,200	15,364	4,700	21,000	10,868

Footnotes: *italicized text* = no usable data (description shown in *italics*).

**U** = not detected at method detection limit (shown in **bold**). Values shown are ½ MDL.

**J** = estimated value below the reporting limit (shown in **bold**).

**Q** = one or more Quality Control criteria was recovered outside of control limits.

---

<sup>1</sup> Mean calculations use 1/2 the method detection for biochemical oxygen demand and total suspended solids.

<sup>2</sup> Mean calculations use geometric mean for fecal coliform.

---

In addition to standard field measurements, field crews documented qualitative observations at each outfall, including odor, water color and clarity, presence of floatables, deposits or staining, surface sheen, and debris. Odors were infrequently observed during the monitoring events. Metallic odors were noted at SWM07 during Storms 1 and 3 and at SWM08 during Storms 1, 2, and 4. Plastic or chemical odors were observed at SWM09A during Storms 3 and 4. During Storm 2, field staff observed human fecal matter adjacent to the outfall at SWM09A, accompanied by a strong fecal odor; this observation was reported to Watershed Management Services (WMS) on the day of discovery. No hydrocarbon odors or surface sheens were documented at any outfall. Deposits or staining consistent with rust or iron staining were observed at multiple locations, including SWM03, SWM05, SWM06, SWM07, SWM08, SWM10, and SWM12, and were commonly associated with corroded infrastructure, stained receiving substrates, or naturally elevated iron conditions typical of Anchorage streams. Debris observations were generally minor and included leaf litter, sediment accumulation, trash near grates, or vegetation buildup on collars. Aside from turbidity-related observations, no attempt was made to correlate qualitative field observations with laboratory analytical results or conventional pollutant concentrations.

### 3.2 Conventional Parameters (BOD<sub>5</sub> and TSS)

Biochemical oxygen demand (BOD<sub>5</sub>) concentrations from the 2025 SWM Program are reported in Figure 12 and in Table 7. Detected concentrations ranged from a low of 1.39 mg/L at SWM09A during Storm 3 to a high of 24.91 mg/L measured at SWM09A during Storm 1.

Measurements for concentrations of total suspended solids (TSS) are presented in Figure 13 and in Table 7. As noted earlier, TSS levels are generally correlated with turbidity measurements. As with turbidity, TSS concentrations were variable between storms and across the monitoring corridor, with some outfalls demonstrating consistently low TSS readings while others exhibited spikes in TSS concentrations. Seven of the ten outfalls sampled in this year's program have mean TSS concentrations below 50 mg/L, with outfall SWM10 having the lowest detected measurement at 5.60 mg/L during Storm 3. In contrast, outfall SWM11 had the highest mean TSS measurement of 372.8 mg/L during Storm 1.

### 3.3 Fecal Coliform

Fecal Coliform measurements are presented in Figure 14 and in Table 7. In general, fecal coliform levels in 2025 were above historical ranges of concentrations observed in 2018 through 2024 but were below those observed in 2017 and 2018. The outfall with the lowest geometric mean of fecal coliform was SWM06 with a concentration of 471 CFU/100mL. Outfalls SWM07, SWM09A, SWM10, and SWM11 also exhibited fecal coliform geometric mean concentration below 1,000 CFU/100mL. The highest geometric mean fecal coliform concentration was found at SWM12 with a geometric mean concentration of 10,868 CFU/100mL.

The highest measured fecal coliform concentration sampled in 2025 was 31,000 CFU/100mL at outfall SWM10 during Storm 3. Overall, peak concentrations found in 2025 were comparatively high from the historical fecal concentrations. A previous analysis of fecal coliform in Anchorage streams indicated that the highest loads would most likely occur in August/September in association with

peak runoff and rainfall (MOA 2003). While SWM program data from 2025 aligns with this analysis, previous data collected as part of this SWM Program so far has not supported that conclusion and suggests that the highest fecal coliform levels should be expected in July for these ten specific outfalls. Yearly and seasonal trends are discussed in further detail in Section 3.7.

Despite the fact that the adopted fecal coliform benchmark of 200 CFU/100mL applied to streams was exceeded during all storms at most outfalls, overall mean concentrations were not alarming when compared to typical concentrations seen in warmer urban areas which can range from the 10,000s to 100,000s CFU/100mL (EPA 1983). However, the high year-to-year variability in fecal coliform measurements suggests the need to continue monitoring this parameter to better assess the performance of control measures.

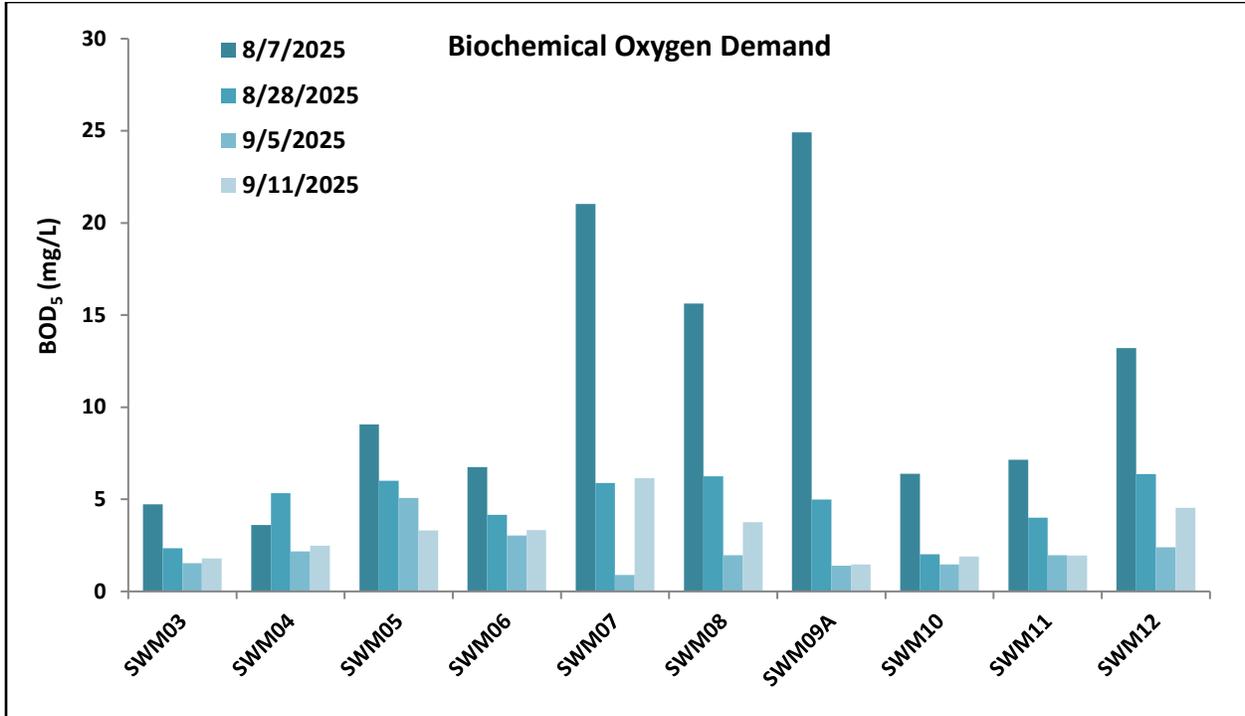


Figure 12. BOD<sub>5</sub> (mg/L) Measured in Stormwater Sampled at Monitoring Sites During All Four Events.

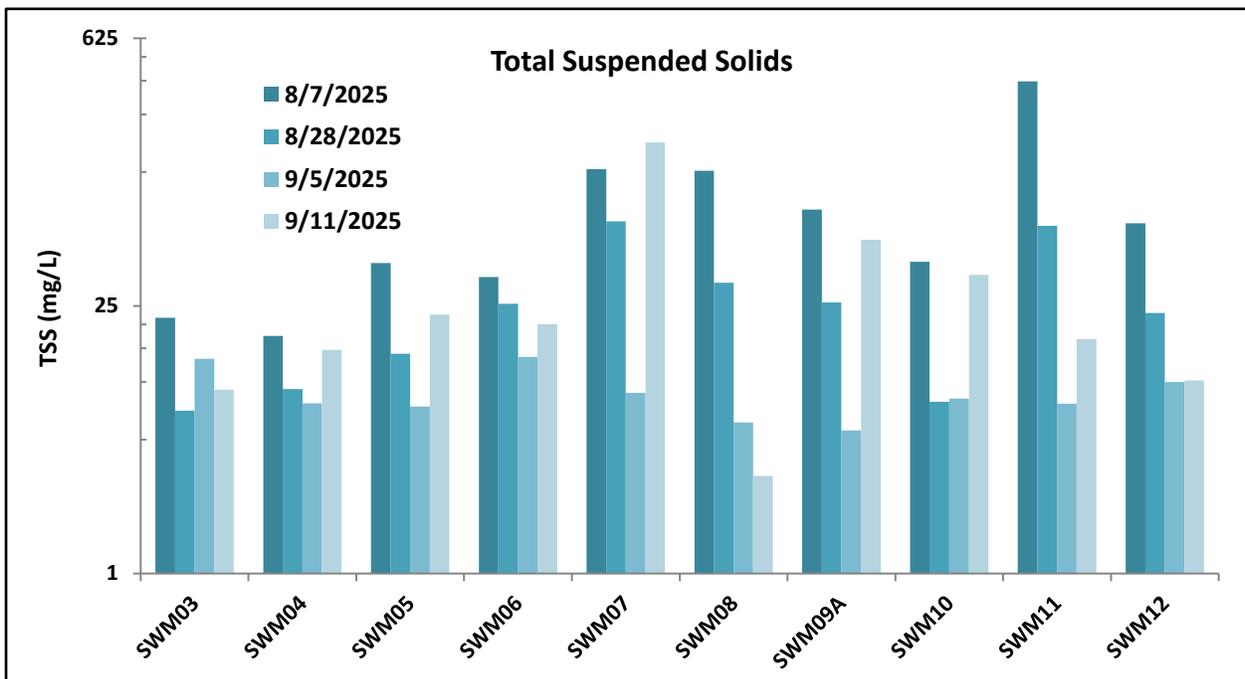
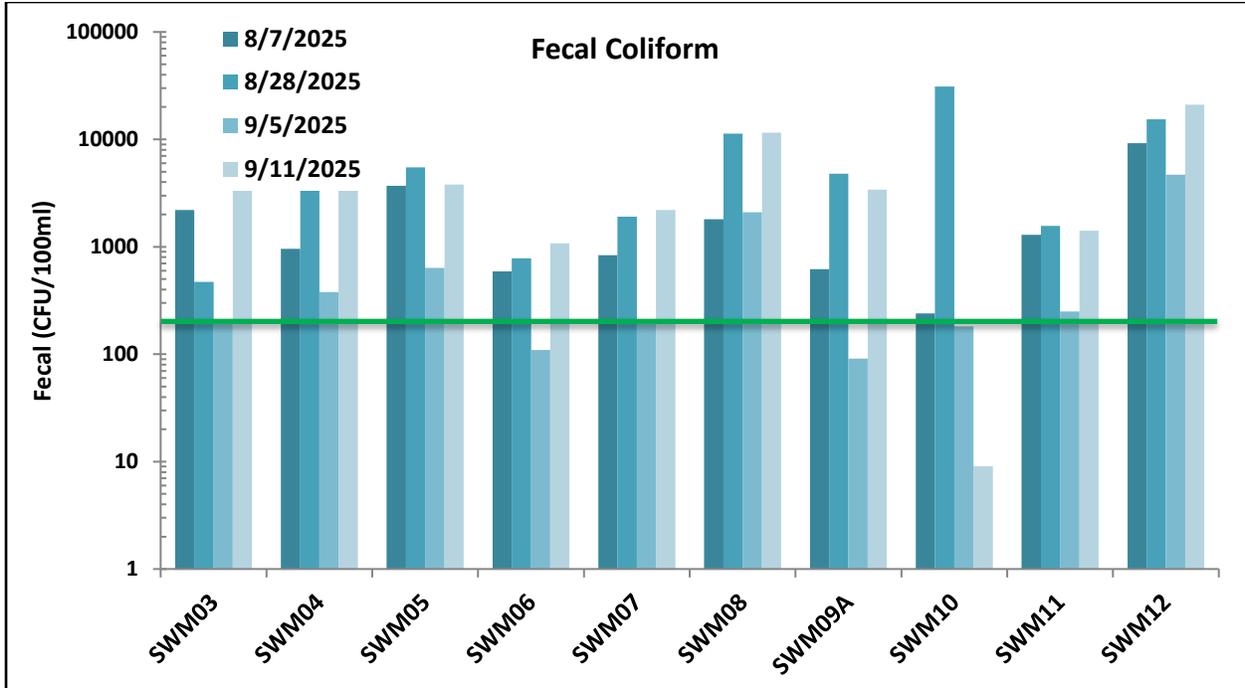


Figure 13. Total Suspended Solids Measured in Stormwater Sampled at Monitoring Sites During All Four Events.



Green line indicates upper AWQS fecal coliform limit of 200 CFU/100 mL.

**Figure 14. Fecal Coliform (FC/100 mL) Measured in Stormwater Sampled at Monitoring Sites During All Four Events.**

### 3.4 Metals and Hardness

Monitoring of dissolved copper and total water hardness were added to the Program in 2016 for all locations and storm events. The monitoring conducted in years prior to 2016 did not include these two parameters.

Hardness measurements are presented in Table 8 and Figure 15. Hardness is an important parameter for freshwater since it interacts with dissolved metals such as copper to affect metal toxicity thresholds. Mean hardness concentrations ranged from a low of 10.3 mg/L at SWM07 to a high of 163.4 mg/L at SWM12. Within the same water body, hardness is generally expected to be inversely correlated with turbidity and TSS; however, due to the variability across outfall sites and years in this study, such correlations cannot be reliably established.

Dissolved copper concentrations are presented in Table 8 and Figure 16. The average dissolved copper concentrations for this year are the lowest observed when compared to data from 2016 through 2024. Dissolved copper concentrations ranged from 1.0 micrograms/liter ( $\mu\text{g/L}$ ) at SWM06, SWM09A, and SWM10 during Storms 3 and 4 to a high of 11.0  $\mu\text{g/L}$  at SWM12 during Storm 4. SWM10 had the lowest mean copper concentration at 1.38  $\mu\text{g/L}$  while SWM12 had the highest mean copper concentration of 6.18  $\mu\text{g/L}$ . The criteria for copper are calculated using a formula that integrates water hardness concentrations. For the State of Alaska, the chronic water quality criteria for copper ranges from 4.95  $\mu\text{g/L}$  at a hardness of 50 mg/L to a concentration of 8.96  $\mu\text{g/L}$  at a hardness value of 100 mg/L. The AWQS criteria applies to the receiving waters and is used for comparison purposes only when evaluating stormwater.

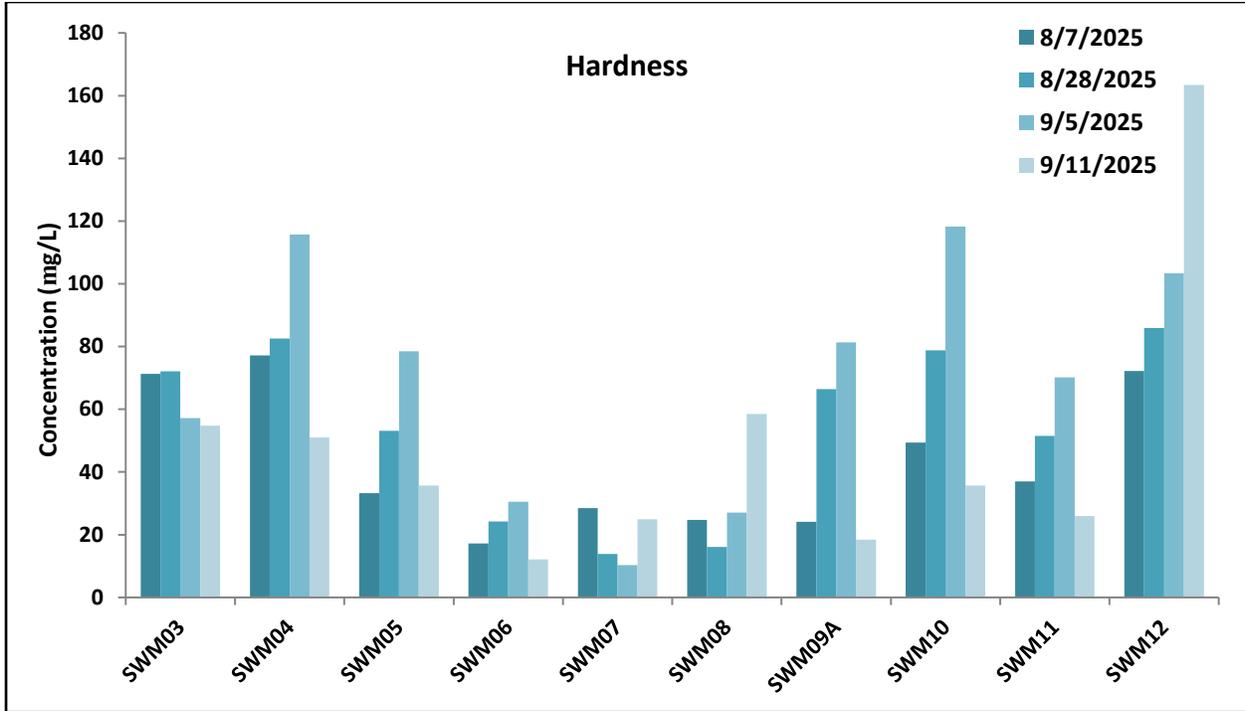
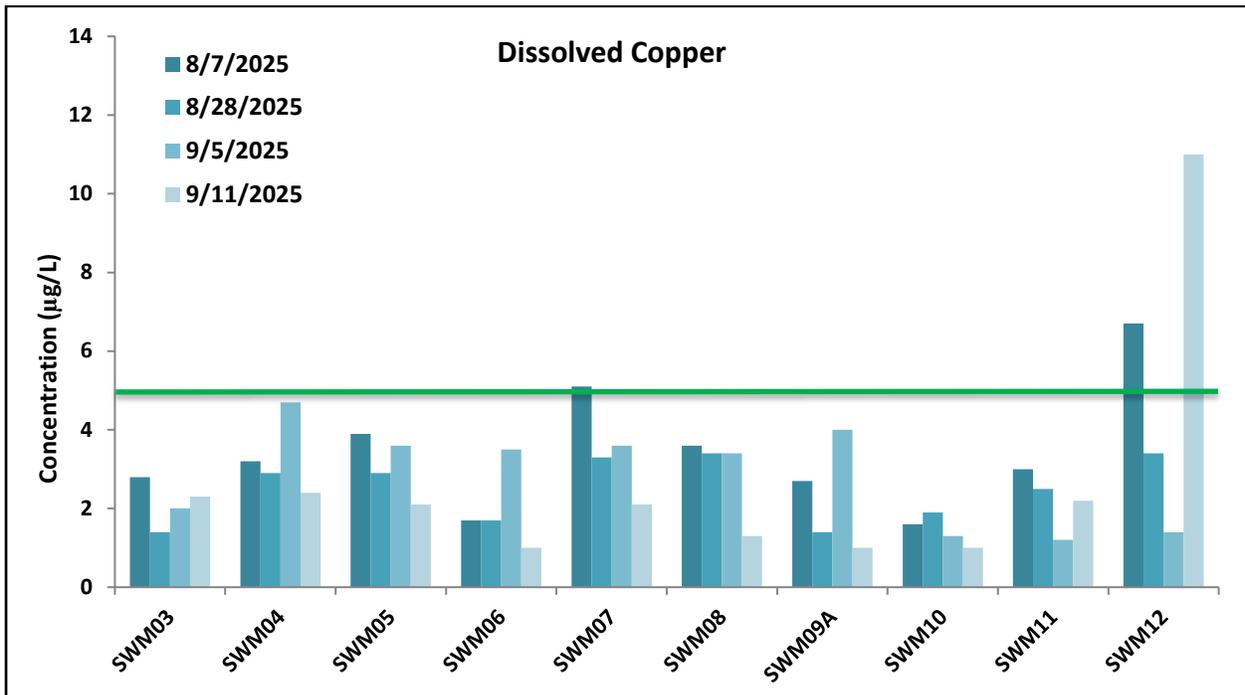


Figure 15. Water Hardness (mg/L) Measured in Stormwater Samples.



Green line indicates the upper AWQS chronic copper limit of 4.95 µg/L based on hardness value of 50 mg/L in the receiving water.

Figure 16. Dissolved Copper (µg/L) Measured in Stormwater Samples.



**Table 8. Concentrations of Hardness and Dissolved Copper.**

Station	Storm 1 07-Aug-2025	Storm 2 28-Aug-2025	Storm 3 05-Sept-2025	Storm 4 11-Sept-2025	Mean
<b>Hardness (mg/L)</b>					
SWM03	71.3	72.1	57.2	54.8	63.9
SWM04	77.2	82.6	115.8	51.0	81.6
SWM05	33.2	53.2	78.5	35.7	50.1
SWM06	17.3	24.2	30.5	12.2	21.0
SWM07	28.5	13.8	10.3	24.9	19.4
SWM08	24.7	16.1	27.1	58.5	31.6
SWM09A	24.1	66.4	81.3	18.4	47.6
SWM10	49.4	78.8	118.2	35.7	70.5
SWM11	37.0	51.5	70.2	25.9	46.1
SWM12	72.2	85.9	103.3	163.4	106.2
<b>Dissolved Copper (µg/L)</b>					
SWM03	2.80	1.40	2.00	2.30	2.13
SWM04	3.20	2.90	3.50	2.40	3.00
SWM05	3.90	2.90	3.60	2.10	3.13
SWM06	1.70	1.70	1.50	1.00	1.48
SWM07	5.10	3.30	4.00	2.10	3.63
SWM08	3.60	1.70	1.40	1.30	2.00
SWM09A	2.70	1.40	1.20	1.00	1.58
SWM10	1.60	1.90	1.00	1.00	1.38
SWM11	3.00	2.50	4.70	2.20	3.10
SWM12	6.70	3.40	3.60	11.00	6.18

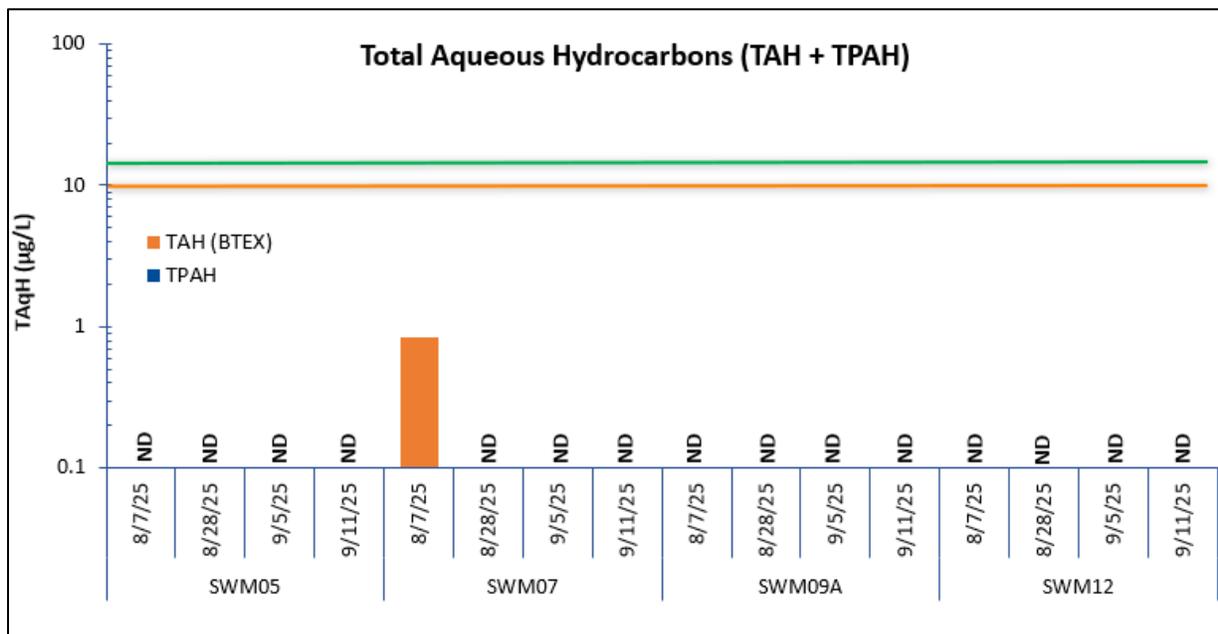


### 3.5 Hydrocarbons

Total aromatic hydrocarbons (TAH) and total polycyclic aromatic hydrocarbons (TPAH) were measured as part of the 2025 SWM Program at four selected outfalls: SWM05, SWM07, SWM09A, and SWM12. In this year’s program, TPAH constituents were not detected at any outfalls during all four storm events, while TAH constituents were detected at SWM07 during Storm 1. For this study, TAH is reported as the summation of detected concentrations of benzene, ethylbenzene, toluene, and xylenes (BTEX). Since 2020, dichlorobenzene and chlorobenzene are not analyzed due to reclassification of these parameters by ADEC. Hydrocarbon measurements are presented in Figure 17 and in Table 9. All samples collected fell within the AWQS criteria (Table 10) of 10 µg/L for TAH and 15 µg/L for total aqueous hydrocarbons (TAqH), representing the summation of TAH and TPAH.

In this year’s program, TAH (BTEX) was detected in one sample. For comparison, BTEX was detected in one sample in 2024, nine samples in 2023, five samples in 2021, and four samples in 2020.

This year, TPAH was not detected in any storm events. In the past, the most commonly detected TPAH compounds were combustion-related compounds including fluoranthene, phenanthrene, and pyrene.



Orange line indicates the upper AWQS TAH limit of 10 µg/L and green line indicates the upper AWQS TAqH limit of 15 µg/L. ND = no concentration detected in any analyte tested.

**Figure 17. Total Aqueous Hydrocarbons (TAqH = TAH + TPAH) Measured in Stormwater Sampled at Monitoring Sites During All Four Events.**

Contaminants, particularly TPAH, can be present in higher levels early in the storm runoff period as result of the first flush of accumulated contaminants from roadways and other urban surfaces. This was generally observed in previous years but not for the 2025 SWM Program.



Of the outfalls tested for hydrocarbons, SWM05 and SWM09 have OGS units, while SWM07 and SWM12 do not. There does not appear to be a correlation between the presence of an OGS unit and measured hydrocarbon concentrations.



**Table 9. Hydrocarbon Concentrations Measured in Stormwater at Four Sites During All Four Storm Events.**

	SWM05 - OGS (Yes)				SWM07 - OGS (No)				SWM09A - OGS (Yes)				SWM12 - OGS (No)			
	8/7/2025	8/28/2025	9/5/2025	9/11/2025	8/7/2025	8/28/2025	9/5/2025	9/11/2025	8/7/2025	8/28/2025	9/5/2025	9/11/2025	8/7/2025	8/28/2025	9/5/2025	9/11/2025
<i>Polycyclic Aromatic Hydrocarbons (µg/L)</i>																
Acenaphthene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Acenaphthylene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Anthracene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Benzo(a)anthracene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Benzo(a)pyrene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Benzo(b)fluoranthene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Benzo(g,h,i)perylene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Benzo(k)fluoranthene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Chrysene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Dibenzo(a,h)anthracene	10U	11U	10U	10U	9.5U	10U	9.4U	10U	9.5U	9.4U	10U	10U	11U	10U	10U	11U
Fluoranthene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Fluorene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Indeno(1,2,3-cd)pyrene	10U	11U	10U	10U	9.5U	10U	9.4U	10U	9.5U	9.4U	10U	10U	11U	10U	10U	11U
Naphthalene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Phenanthrene	4.1U	4.3U	4U	4.1U	3.8U	4U	3.8U	4U	3.8U	3.8U	4U	4.1U	4.5U	4U	4.1U	4.2U
Pyrene	10U	11U	10U	10U	9.5U	10U	9.4U	10U	9.5U	9.4U	10U	10U	11U	10U	10U	11U
<i>Volatile Aromatic Hydrocarbons (µg/L)</i>																
Benzene	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
Ethylbenzene	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
Toluene	1U	1U	1U	1U	<b>0.85J</b>	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
Xylenes, Total	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U	1U
<i>Hydrocarbon Summary Parameters (µg/L)</i>																
TPAH	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TAH as BETX	ND	ND	ND	ND	<b>0.85</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TAQH (TPAH + TAH)	ND	ND	ND	ND	<b>0.85</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Footnotes: U = Not detected at the method detection limit. J = Estimated value below the reporting limit. J- = Estimated value may be biased low. J+ = Estimated value may be biased high. UJ- = Not detected at the reporting limit but maybe be biased low. ND = No concentration detected in any analyte tested.

All detected concentrations are shown in bold. Hydrocarbon summary parameters only include detected concentrations.

PAH results for the third storm may be biased high due to MS/MSD percent recoveries exceedance under QAP. However, MS/MSD percent recoveries are within limits under the laboratory percent recovery limits.



**Table 10. Pertinent Numeric Alaska Water Quality Standard (AWQS) Criteria.**

Designated Use	Description of Standard
<b>Fecal Coliform Bacteria</b>	
(A) Water Supply (i) drinking, culinary and food processing	In a 30-day period, the geometric mean may not exceed 20/FC/100 ml, and not more than 10% of the samples may exceed 40 FC/100 ml.
(A) Water Supply (ii) agriculture, including irrigation and stock watering	The geometric mean of samples taken in a 30-day period may not exceed 200 FC/100 ml, and not more than 10% of the samples may exceed 400 FC/100 ml. For products not normally cooked and for dairy sanitation of unpasteurized products, the criteria for drinking water supply, (1)(A)(i), apply.
(A) Water Supply (iii) aquaculture	For products normally cooked, the geometric mean of samples taken in a 30-day period may not exceed 200 FC/100 ml, and not more than 10% of the samples may exceed 400 FC/100 ml. For products not normally cooked, the criteria for drinking water supply, (1)(A)(i), apply.
(A) Water Supply (iii) Industrial	Where worker contact is present, the geometric mean of samples taken in a 30-day period may not exceed 200 FC/100 ml, and not more than 10% of the samples may exceed 400 FC/100 ml.
(B) Water Recreation (iv) contact recreation	In a 30-day period, the geometric mean of samples may not exceed 100 FC/100 ml, and not more than one sample or more than 10% of the samples if there are more than 10 samples, may exceed 200 FC/100 ml.
(B) Water Recreation (ii) secondary contact	In a 30-day period, the geometric mean of samples may not exceed 200 FC/100 ml, and not more than 10% of the total samples may exceed 400 FC/100 ml.
(C) Growth and Propagation of Fish, Shellfish, other Aquatic Life and Wildlife	Not applicable.
<b>Dissolved Oxygen (most restrictive shown)</b>	
(A) Water Supply (iii) aquaculture (C) Growth and Propagation of Fish, Shellfish, other Aquatic Life and Wildlife	DO must be greater than 7mg/L in surface waters. The concentration of total dissolved gas may not exceed 110% of saturation at any point of sample collection.
<b>pH</b>	
(A) Water Supply (i) drinking, culinary and food processing	May not be less than 6.0 or greater than 8.5.
(A) Water Supply (ii) agriculture, including irrigation and stock watering, & (iv) Industrial	May not be less than 5.0 or greater than 9.0.
(A) Water Supply (iii) aquaculture	May not be less than 6.5 or greater than 8.5. May not vary more than 0.5 pH unit from natural conditions.
(B) Water Recreation (iv) contact recreation	May not be less than 6.5 or greater than 8.5. If natural condition pH is outside this range, substances may not be added that cause an increase in the buffering capacity of the water.
(B) Water Recreation (ii) secondary contact	Same as (6)(A)(iv)
(C) Growth and Propagation of Fish, Shellfish, other Aquatic Life and Wildlife	May not be less than 6.5 or greater than 8.5. May not vary more than 0.5 pH unit from natural conditions.



Designated Use		Description of Standard				
<b>Petroleum Hydrocarbons</b>						
(A) Water Supply (iii) aquaculture & (C) Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife.		TAqH in the water column may not exceed 15 µg/L. TAH in the water column may not exceed 10 µg/L. Surface waters and adjoining shorelines must be virtually free from floating oil, film, or discoloration.				
<b>Dissolved Inorganic Substances</b> (most restrictive shown)						
(A) Water Supply (i) drinking, culinary, and food processing		Total dissolved solids (TDS) from all sources may not exceed 500 mg/L.				
<b>Temperature</b> (most restrictive shown)						
(A) Water Supply (iii) aquaculture & (C) Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife.		The following maximum temperatures may not be exceeded, where applicable: Migration routes and rearing areas: 15°C Spawning areas, egg & fry incubation: 13°C				
<b>Turbidity</b>						
(A) Water Supply (i) drinking, culinary, and food processing		May not exceed 5 nephelometric turbidity units (NTU) above natural conditions when the natural turbidity is 50 NTU or less, and may not have more than 10% increase in turbidity when the natural turbidity is more than 50 NTU, not to exceed a maximum increase of 25 NTU.				
(A) Water Supply (ii) agriculture, including irrigation and stock watering		May not cause detrimental effects on indicated use.				
(A) Water Supply (iii) aquaculture		May not exceed 25 NTU above natural conditions. For all lake waters, may not exceed 5 NTU above natural conditions.				
(A) Water Supply (iv) industrial		May not cause detrimental effects on established water supply treatment levels.				
(B) Water Recreation (i) contact recreation		May not exceed 5 NTU above natural conditions when the natural turbidity is 50 NTU or less, and may not have more than 10% increase in turbidity when the natural turbidity is more than 50 NTU, not to exceed a maximum increase of 15 NTU. May not exceed 5 NTU above natural turbidity for all lake waters.				
(B) Water Recreation (ii) secondary recreation		May not exceed 10 NTU above natural conditions when natural turbidity is 50 NTU or less, and may not have more than 20% increase in turbidity when the natural turbidity is greater than 50 NTU, not to exceed a maximum increase of 15 NTU. For all lake waters, turbidity may not exceed 5 NTU above natural turbidity.				
(C) Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife		Same as (12)(A)(iii).				
<b>Dissolved Copper</b> (µg/L)						
Metal	mA	bA	mC	bC	Freshwater Conversion Factors (CF)	
					Acute (CMC)	Chronic (CCC)
Copper	0.9422	-1.700	0.8545	-1.702	0.960	0.960

Hardness-dependent criteria may be calculated from the following for freshwater metals:

$$\text{Acute (dissolved)} = \exp \{mA[\ln(\text{hardness})] + bA\} \text{ (CF)}$$

$$\text{Chronic (dissolved)} = \exp \{mC[\ln(\text{hardness})] + bC\} \text{ (CF)}$$

### 3.6 Multi-Year Site Trends

Review of the SWM Program data record reveals persistent differences between outfalls with regards to measured parameters. This section discusses site trends for each parameter, and where applicable, statistical analysis is used to further examine these trends.

The stormwater outfall sampling conducted in 2025 represents the fifteenth year of sampling under the SWM Program. These 15 years of sampling provide a data record for preliminary investigation of differences between the monitoring sites included in the program. General site differences were investigated through statistical analysis to compare outfalls where applicable for parameters that follow normal or log-normal distributions. Box plots have been prepared for visualization of the data record for each parameter tested (Figure 18 through Figure 26). The box plots depict the minimum, maximum, median, 25<sup>th</sup>-percentile, and 75<sup>th</sup>-percentile of the data collected over the 15-year monitoring period. It should be noted that outfalls SWM11 and SWM12 were added to the SWM Program in 2017 and therefore have seven-year data records. It is important to note that due to the relatively short data record, caution should be warranted when comparing outfalls. Given evolving land uses and myriad other influences, it can be difficult to compare multivariate environmental systems based on short data records.

Review of the SWM Program data record indicates that there are significant differences in outfall temperature across at least some of the 10 outfalls tested (ANOVA p-value of  $1.2 \times 10^{-05}$ ). cursory observation of the box plot data (Figure 18) indicates that temperature readings tend to be lower at SWM03 and SWM10 than at other outfalls. Similarly, SWM04 appears to trend warmer than other outfalls, and has a median temperature around two degrees Celsius higher than SWM03 and SWM10. These differences were found to be statistically significant between the highest and lowest temperatures (Paired T-Test p-value of  $7.2 \times 10^{-21}$ ), supporting the conclusion that there are significant, persistent differences in temperature between at least some of the outfalls.

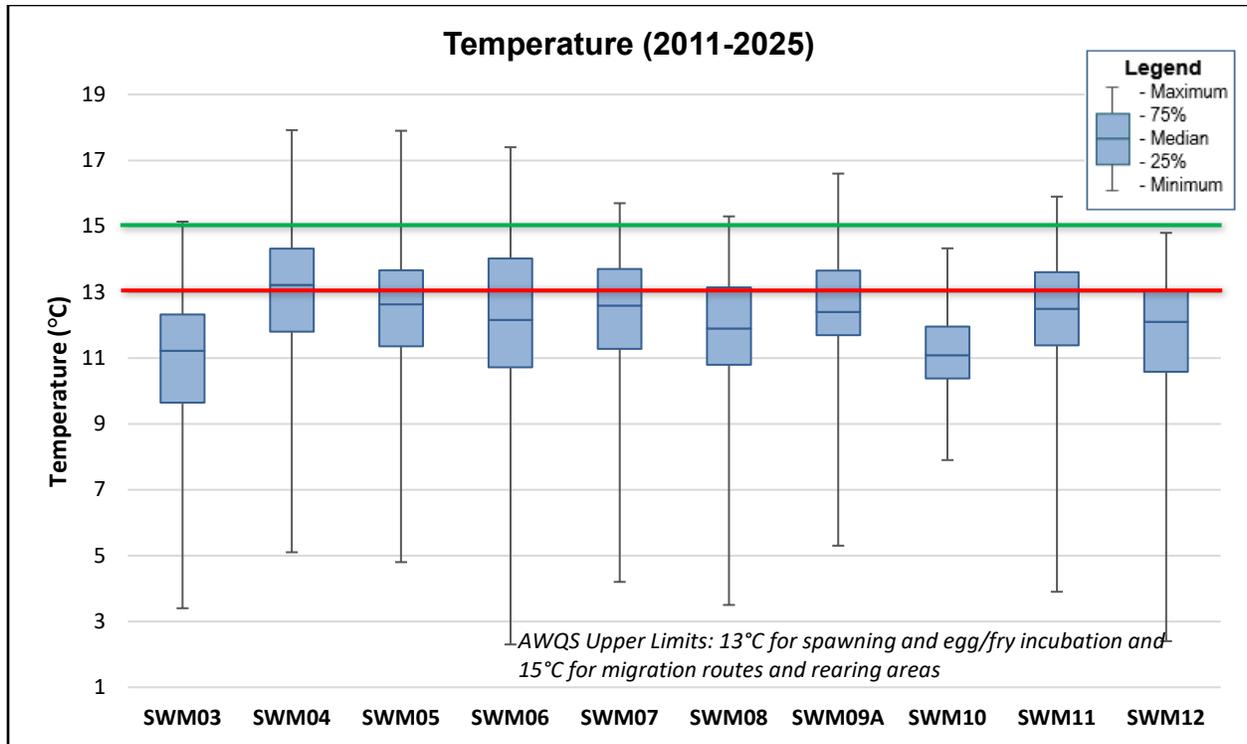


Figure 18. Station Box Plot of Temperature by Outfall, All Data 2011 Through 2025.

The box plot data record for DO is presented in Figure 19. Like temperature, DO concentrations are assumed to follow a normal distribution at each site. There is statistically significant variation between outfall sites (ANOVA p-value of  $4 \times 10^{-15}$ ), but all sites generally are above the AWQS limit of 7 mg/L. Throughout the data record, SWM10 has the highest median DO concentration of 11.02 mg/L and is statistically distinct from each of the other outfall sites. The elevated DO at SWM10 is potentially due to persistently lower water temperatures and turbulent flow in the outfall pipe prior to discharge.

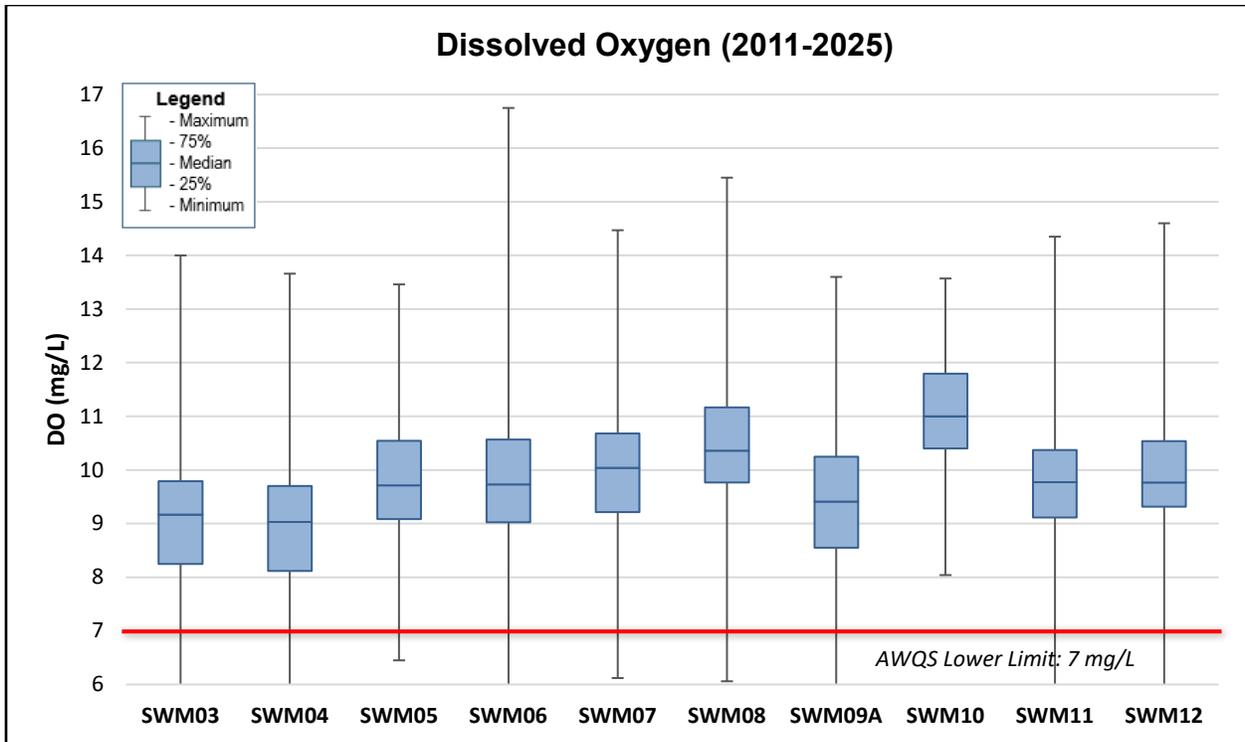
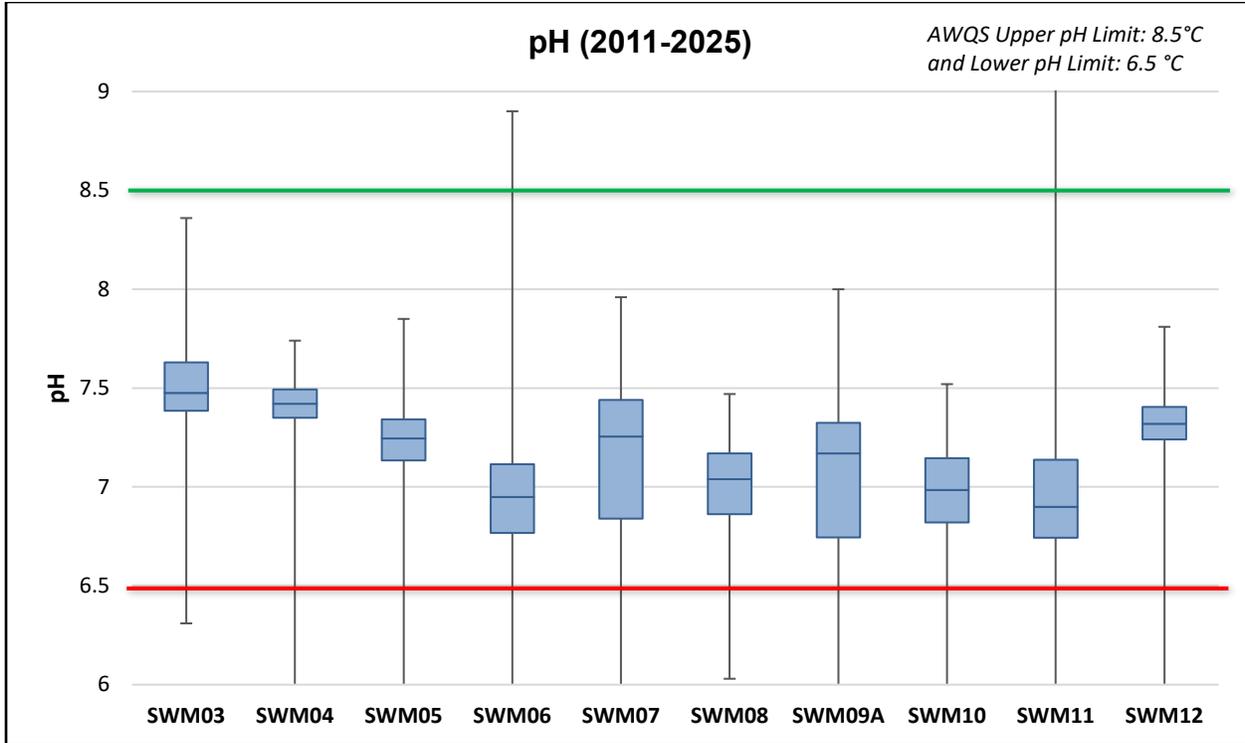


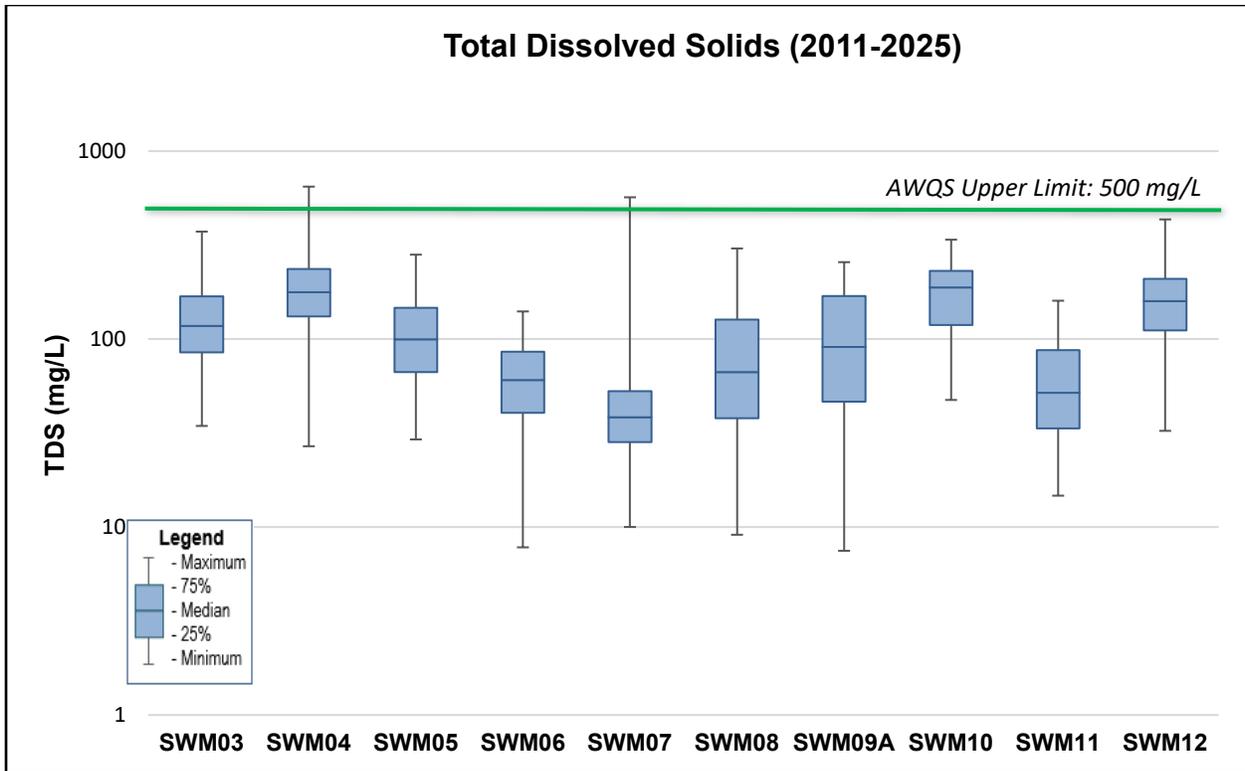
Figure 19. Station Box Plot of Dissolved Oxygen by Outfall, All Data 2011 Through 2025.

The median pH at outfalls SWM06, SWM07, SWM08, SWM10, and SWM11 trend lower than at other outfalls with median values ranging from 6.89 to 7.01 (Figure 20). These four outfalls are statistically indistinguishable from one another with regards to mean pH (single factor ANOVA of the four sites, p-value of 0.5). There were several isolated individual measurements in the data record below the AWQS lower limit of 6.5 pH units, including nine measurements in 2025 (provided in Table 6). There were no isolated individual measurements in 2025 that were above the AWQS upper limit of 8.5 pH units. Only two individual measurements in the data record have exceeded the AWQS pH criterion of 8.5 pH units, both occurred in 2021. These deviations above a pH of 8.5 appear to be isolated and likely not part of a broader trend.



**Figure 20. Station Box Plot of pH by Outfall, All Data 2011 Through 2025.**

The data record for TDS is presented in Figure 21. TDS levels trend highest at SWM04, SWM10, and SWM12 with median values of 177.48, 188.34, and 159.12 mg/L, respectively. It should be noted that median TDS levels for both SWM04 and SWM10 fall well below the AWQS criterion of 500 mg/L. In 2025, none of the measurements exceeded the AWQS criterion of 500 mg/L. Only one other sample in the data record, collected in 2013 at SWM04, has ever exceeded the AWQS threshold. The comparatively elevated TDS at SWM04 and SWM10 may be an indication of pollutants such as fertilizer, salts, or organic ions flushing from the contributing drainage basins. Both outfalls drain primarily residential areas.



**Figure 21. Station Box Plot of Total Dissolved Solids by Outfall, All Data 2011 Through 2025.**

The box plots for TSS and turbidity are presented in Figure 22 and Figure 23, respectively. Over the record of monitoring, both TSS and turbidity have been highly variable between storms and locations, although there is a general positive correlation between TSS and turbidity visible in the box plots. The highest median TSS and turbidity concentrations were detected at SWM07 and at SWM12, with median TSS and turbidity concentrations over double those of any of the other outfalls in the data record. Further statistical analysis was not performed. Over the record of monitoring, Outfall SWM10 continues to exhibit the lowest median TSS and turbidity of the outfalls.

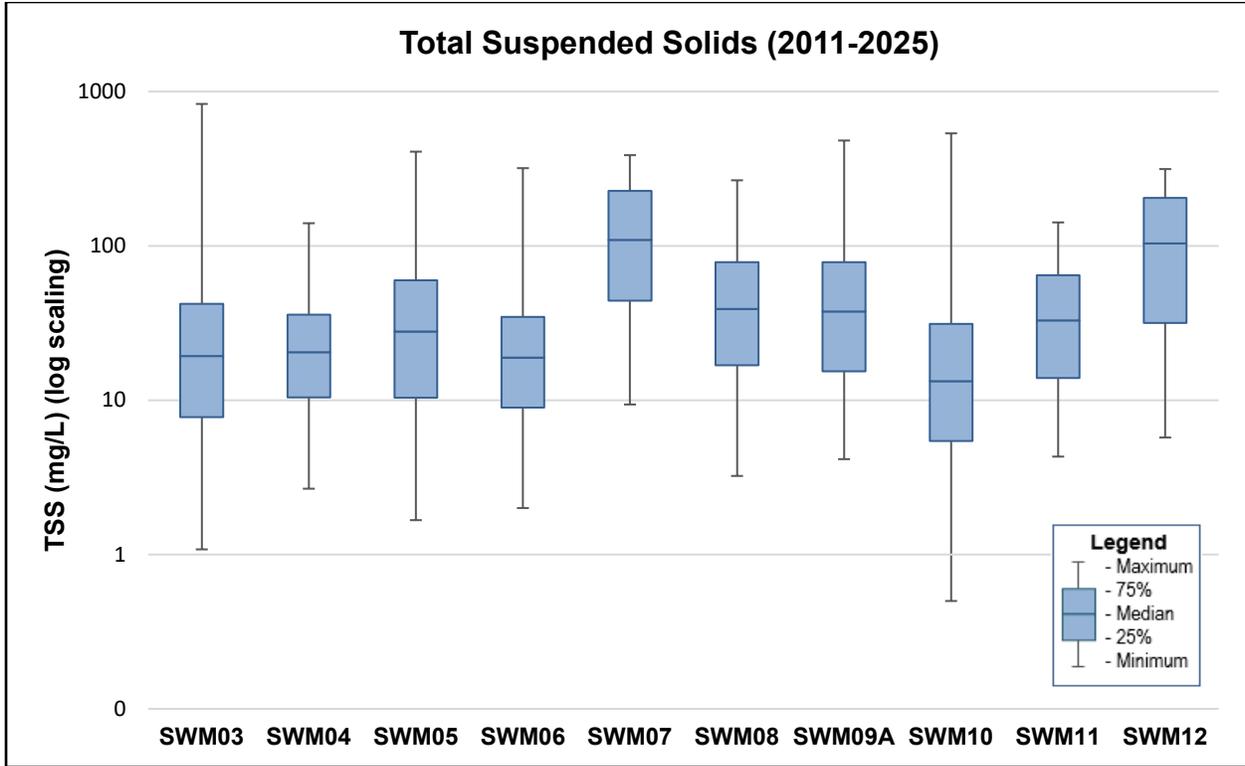


Figure 22. Station Box Plot of Total Suspended Solids by Outfall, All Data 2011 Through 2025.

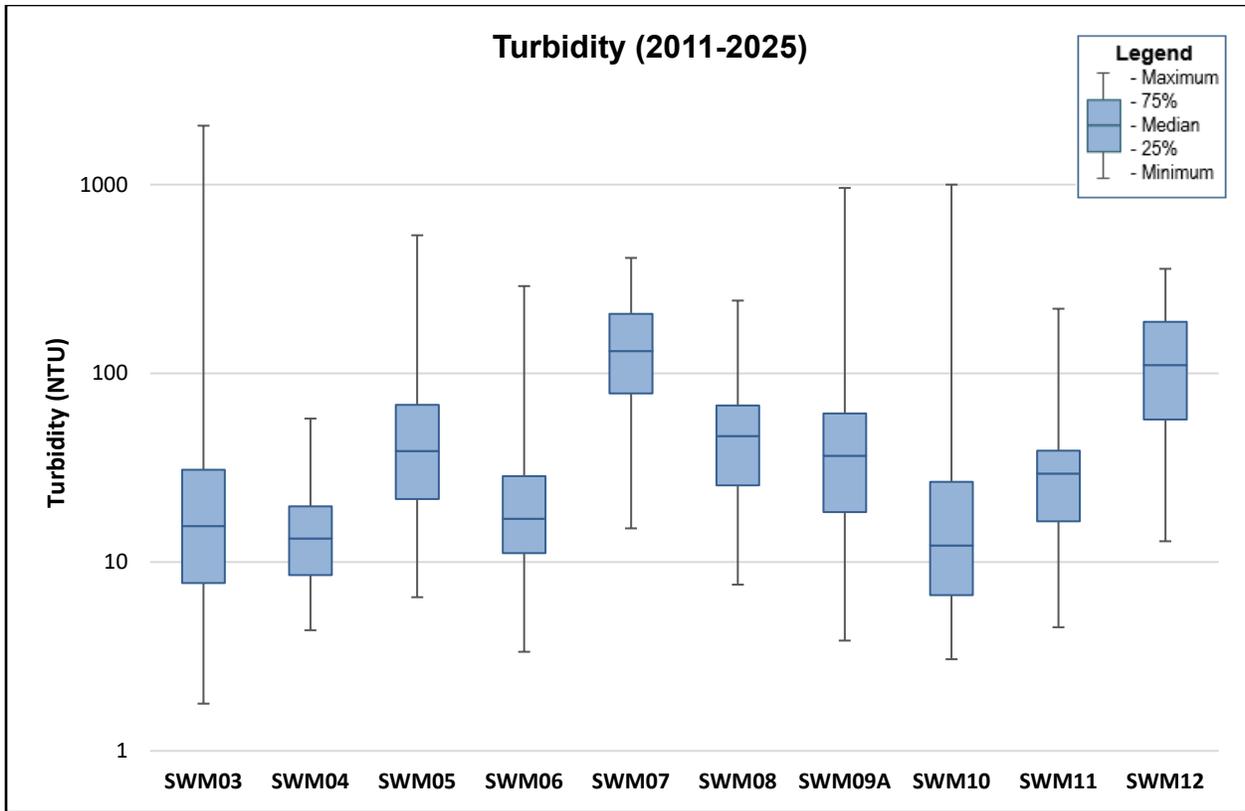
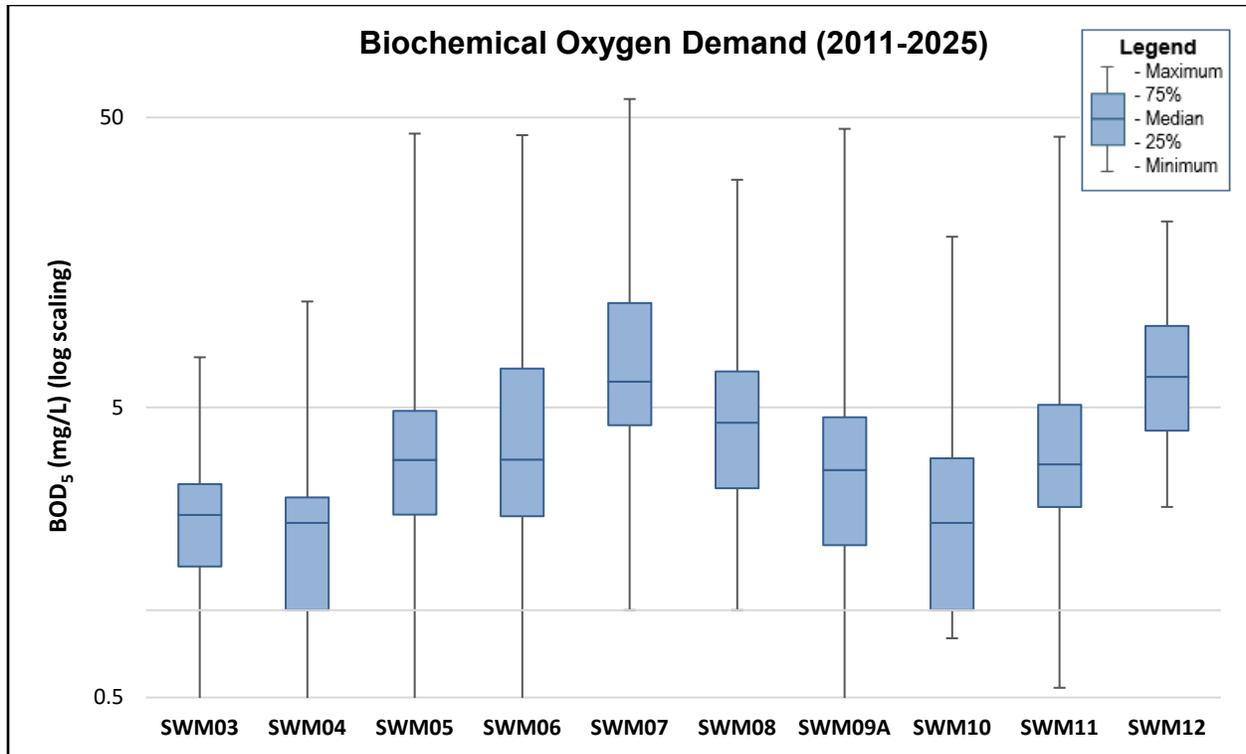


Figure 23. Station Box Plot of Turbidity by Outfall, All Data 2011 Through 2025.

SWM07 and SWM12 have the highest median BOD<sub>5</sub> concentration seen throughout the data record (Figure 24), 6.14 mg/L and 6.37 mg/L respectively. Historic mean BOD<sub>5</sub> concentrations at SWM07 and SWM12 are statistically indistinguishable (Paired T-Test p-value of 0.50). Both outfalls drain commercial/industrial land use areas that include a high percentage of streets, parking lots, and other impervious surfaces. The elevated BOD<sub>5</sub> concentrations at these outfalls may be a result of vehicle cooling liquid inputs (glycols) from streets and driveways. In contrast, SWM04 and SWM10 have the lowest mean BOD<sub>5</sub> concentration seen throughout the seen throughout the data record, both at 2.00 mg/L.



**Figure 24. Station Box Plot of BOD<sub>5</sub> by Outfall, All Data 2011 Through 2025.**

The box plot data record for fecal coliform is presented in Figure 25. Outfall sites SWM 05, SWM07, SWM08, SWM11, and SWM12 have the highest median fecal coliform concentrations of the ten monitoring sites, with median concentrations of 1500, 2150, 1400, 1350, and 4900 CFU/100mL respectively. During 2025, multiple outfalls had notable high concentrations of fecal coliform, with Storms 1 through 4 recording fecal coliform concentrations of over 4000 CFU/100mL. Historic mean fecal coliform concentrations at SWM07 and SWM12 are statistically indistinguishable (Paired T-Test p-value of 0.25). The sources of the higher concentrations seen at SWM05, SWM07, SWM 08, SWM11, and SWM12 are unknown, but it is likely that the factors contributing to elevated fecal coliform measurements differ at each site. SWM10 consistently has the lowest fecal coliform concentrations with a median concentration of 230 CFU/100mL.

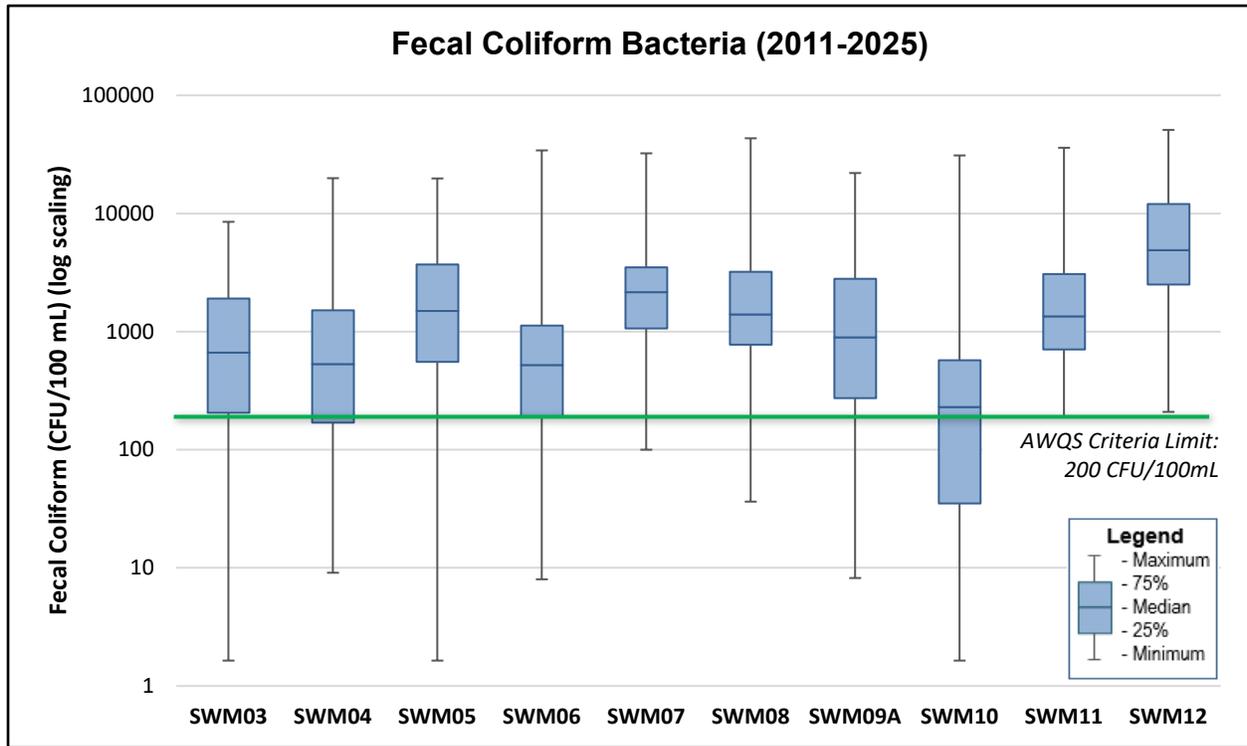


Figure 25. Station Box Plot of Fecal Coliform Bacteria by Outfall, All Data 2011 Through 2025.

The box plot for the flow rate data record is presented in Figure 26. Flow rate was highly variable between locations and between events, reflecting variability in both precipitation and basin characteristics throughout the monitoring corridor. For some outfalls, particularly for those with small drainage basins, flow rates responded rapidly to changes in precipitation. Outfall SWM08 drains the largest basin and has consistently higher flow rates than the other locations.

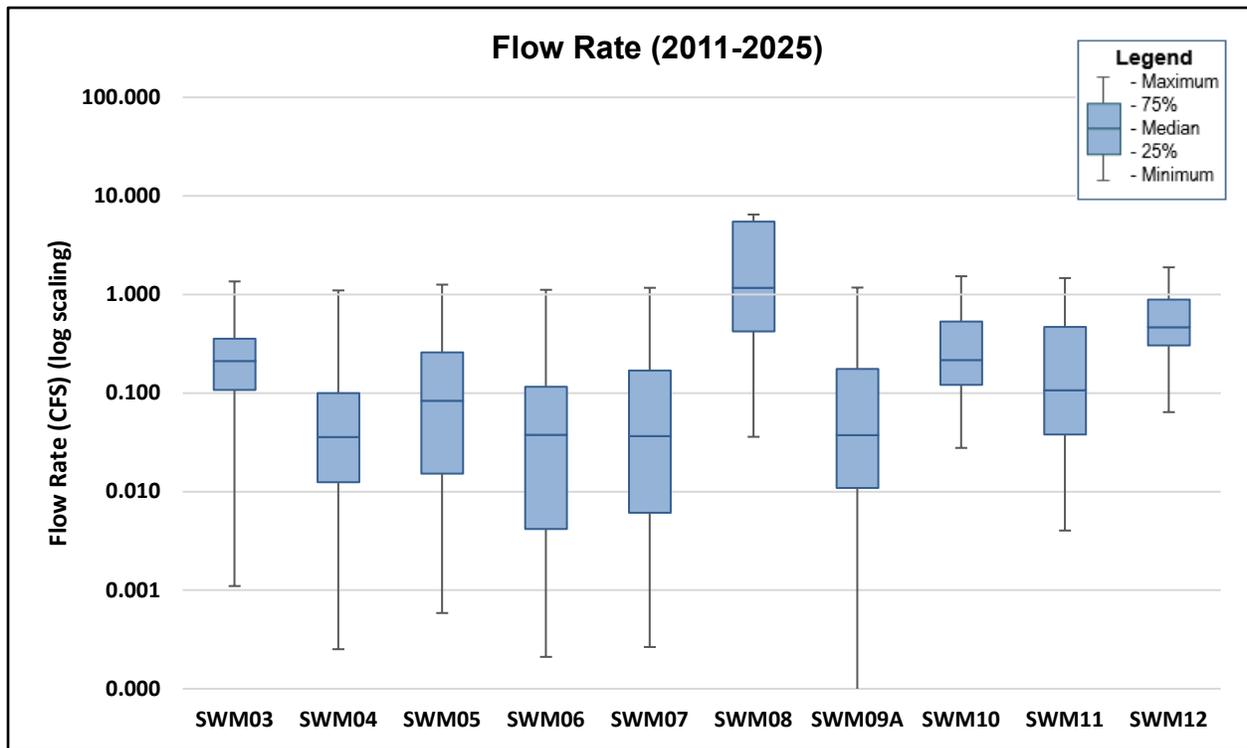


Figure 26. Station Box Plot of Flow Rate by Outfall, All Data 2011 Through 2025.

Box plots for hardness and dissolved copper concentrations are presented in Figure 27 and Figure 28 respectively. Hardness and copper were first added to the SWM Program in 2016, and as a result, these box plots represent a shorter nine-year data record. There is a general inverse relationship visible between hardness and dissolved copper concentrations. SWM10 has the highest median hardness concentration and the lowest median dissolved copper concentrations among the 10 outfalls included in the SWM Program. Conversely, SWM07 had the lowest median hardness and the highest dissolved copper concentrations. For dissolved copper, variation between the outfall sites was not statistically significant (ANOVA p-value of 0.55). For hardness, variation between outfall sites was statistically significant (ANOVA p-value of  $1.1 \times 10^{-29}$ ).

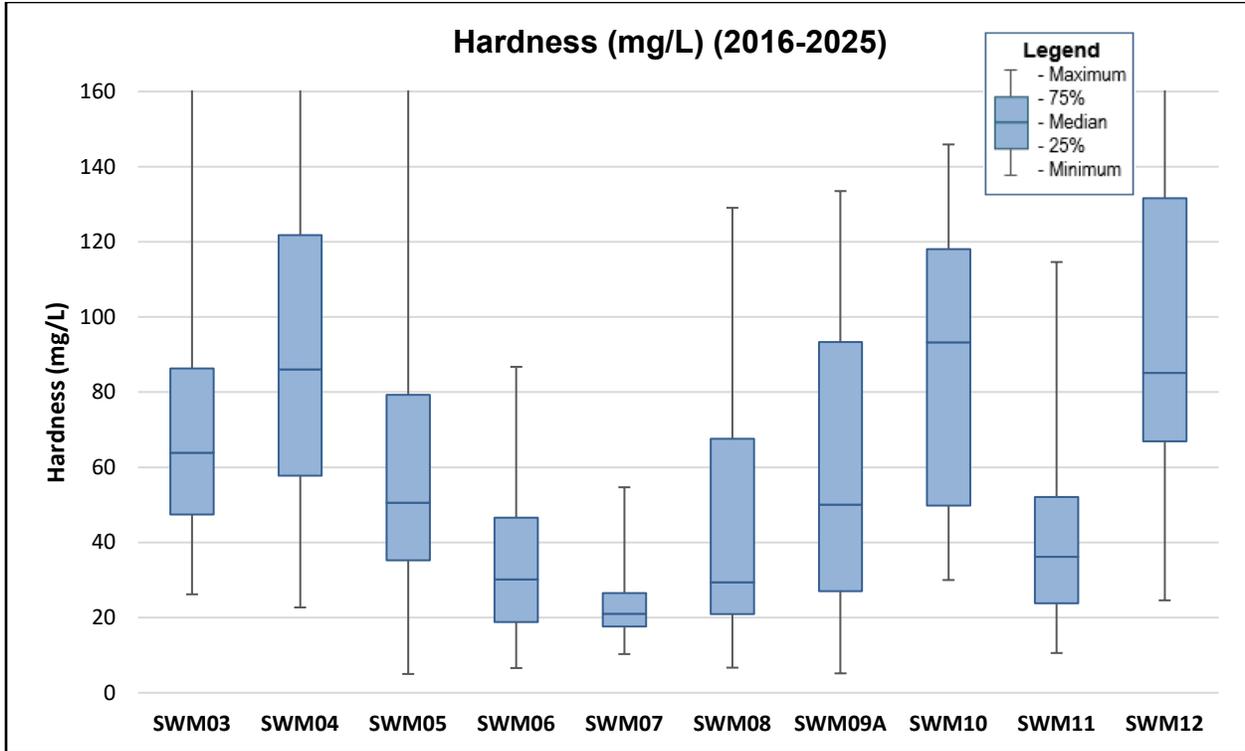


Figure 27. Station Box Plot of Hardness by Outfall, All Data 2016 Through 2025.

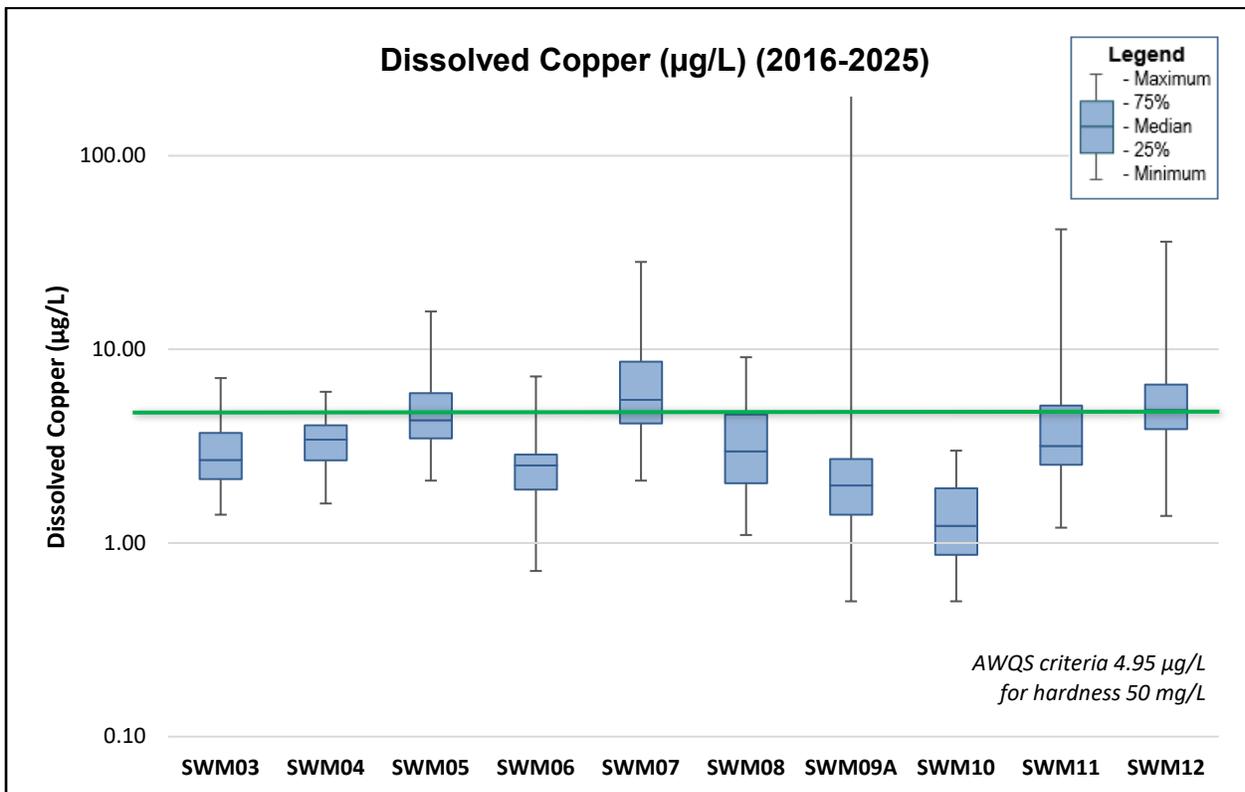


Figure 28. Station Box Plot of Dissolved Copper by Outfall, All Data 2016 Through 2025.

### 3.7 Seasonal and Yearly Trends

The SWM Program data record was examined for seasonal and yearly trends. The timing of outfall monitoring varies year-to-year depending on weather conditions and the timing of suitable storm events, and parameters can vary with season. Typically, sampling for the SWM Program begins in July and continues through September. The 2025 SWM Program first sampled on August 7 and concluded on September 11, falling within the typical window for sampling based on prior monitoring years.

Figure 29 presents the seasonal patterns for key parameters for the data record from 2011 through 2025, plotted against the day of the year. As expected, temperature fluctuates with season and was highest across all locations in July and August. DO fluctuates inversely to temperature, with the lowest DO concentrations occurring during the summer months when temperatures are highest, and increasing DO concentrations in the fall as water temperatures cool. Fecal coliform concentrations are not as highly correlated with seasonality as are temperature and DO. It appears that fecal coliform concentrations may decrease in the fall months, though more data is needed to support this conclusion. Seasonal pattern regression values are presented on each plot where the data have been fitted to a third-order polynomial.

There are significant year-to-year fluctuations for various parameters tested, but there do not appear to be any significant broader trends evident in the data. For example, fecal coliform concentrations vary each monitoring year, with spikes in the data occurring seemingly at random at many of the outfalls throughout the data record. There are spikes in the data (greater than 10,000 CFU/100mL) at two of the outfalls in 2016, six outfalls in 2017, five outfalls in 2018, none in 2019, one outfall in 2020, two outfalls in 2021, one outfall in 2022, one outfall in 2023, three outfalls in 2024, and three outfalls in 2025. There is significant variability year to year in fecal coliform concentrations that can only partially be explained by seasonal patterns and does not appear to fit any long-term trends. Overall, fecal coliform levels in 2025 were above those observed in 2016 through 2024.

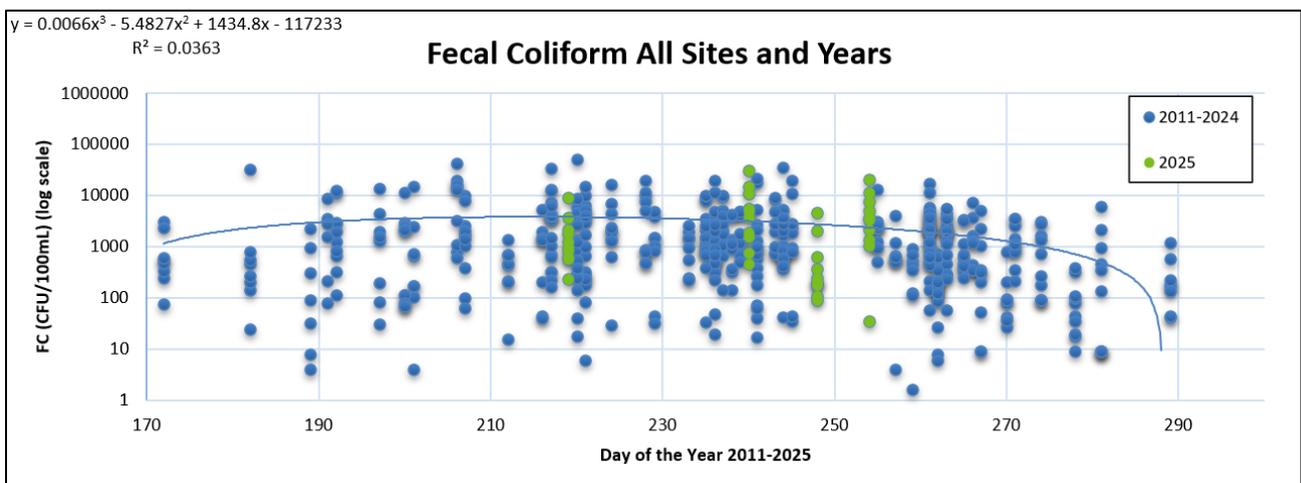
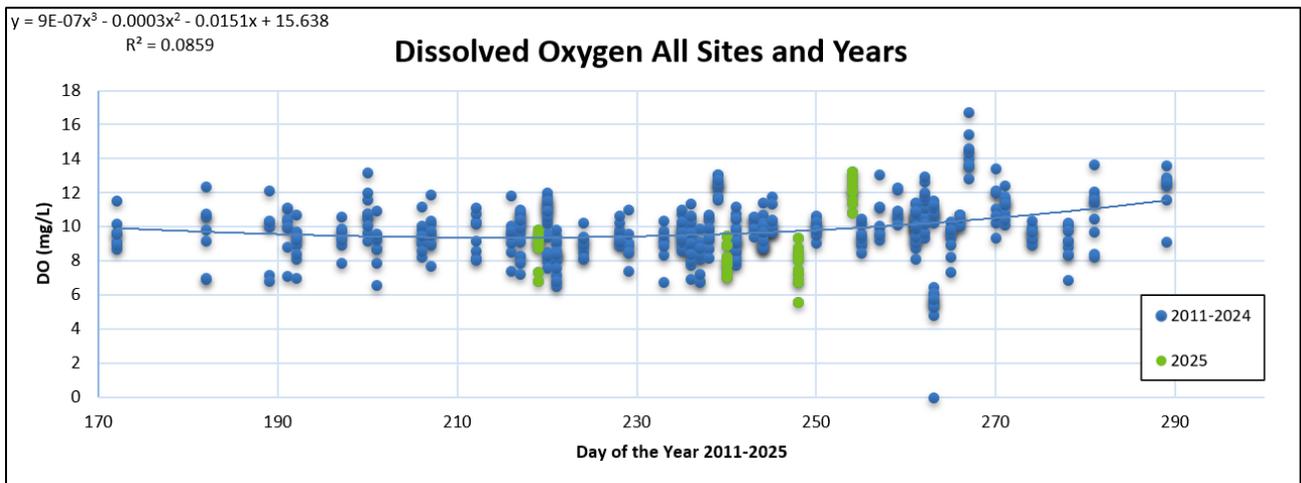
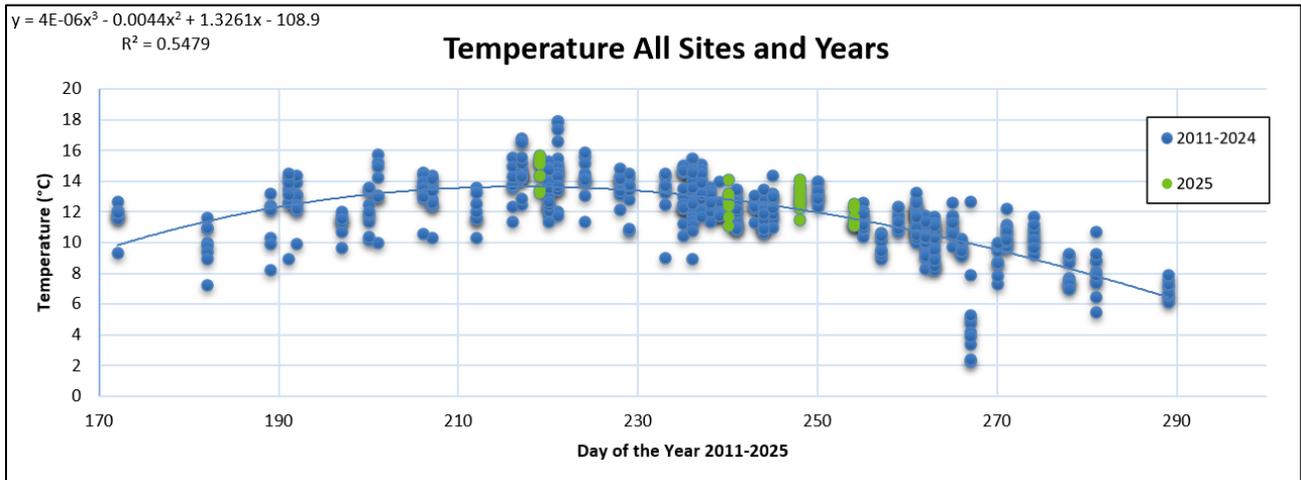


Figure 29. Seasonal Patterns for Temperature, DO, and Fecal Coliform, All Sites and All Years.

### 3.8 Annual Loading

Annual loadings for fecal coliform and hydrocarbons are presented in Figure 30 and Figure 31. These annual loadings are calculated using the Simple Method, which was developed under an EPA grant to provide Phase II communities with tools to protect their local watersheds (SMRC 2010). Anchorage is a Phase I community but can still successfully apply this method. The Simple Method estimates stormwater runoff pollutant loads for urban areas based on the following parameters: subbasin drainage area and percent impervious cover, flow-weighted or event-mean stormwater runoff pollutant concentrations, and annual precipitation. Calculations are based on specific land uses (e.g., residential, commercial, industrial, roadways) to calculate annual pollutant loads for each land use type. The method can also be used for pollutant comparisons by more general land uses such as new suburban areas, older urban areas, central business districts, and highways. Equations and calculation methodology utilized for the Simple Method are detailed in Attachment B of the QAP (MOA 2020).

A major limitation for this method is using a single grab sample for each storm event rather than using flow-weighted data. SMRC 2010 does not address the Simple Method's applicability to organic compounds such as petroleum hydrocarbons, even though comparisons are provided in this report. Therefore, the loading data presented here are considered estimates that may provide useful information for making general comparisons, but do not provide the precision required for detailed comparisons.

Annual loading estimates were developed for both fecal coliform and hydrocarbons. Fecal coliform loading calculations (Figure 30) utilized the annual geometric mean for each location to account for the high variability in fecal coliform counts. For hydrocarbons, both TPAH and TAH (as BTEX) were examined. Hydrocarbon loading calculations (Figure 31) utilize the annual arithmetic mean for each location and individual samples that tested below the detection limit used one half of the detection limit when calculating the mean.

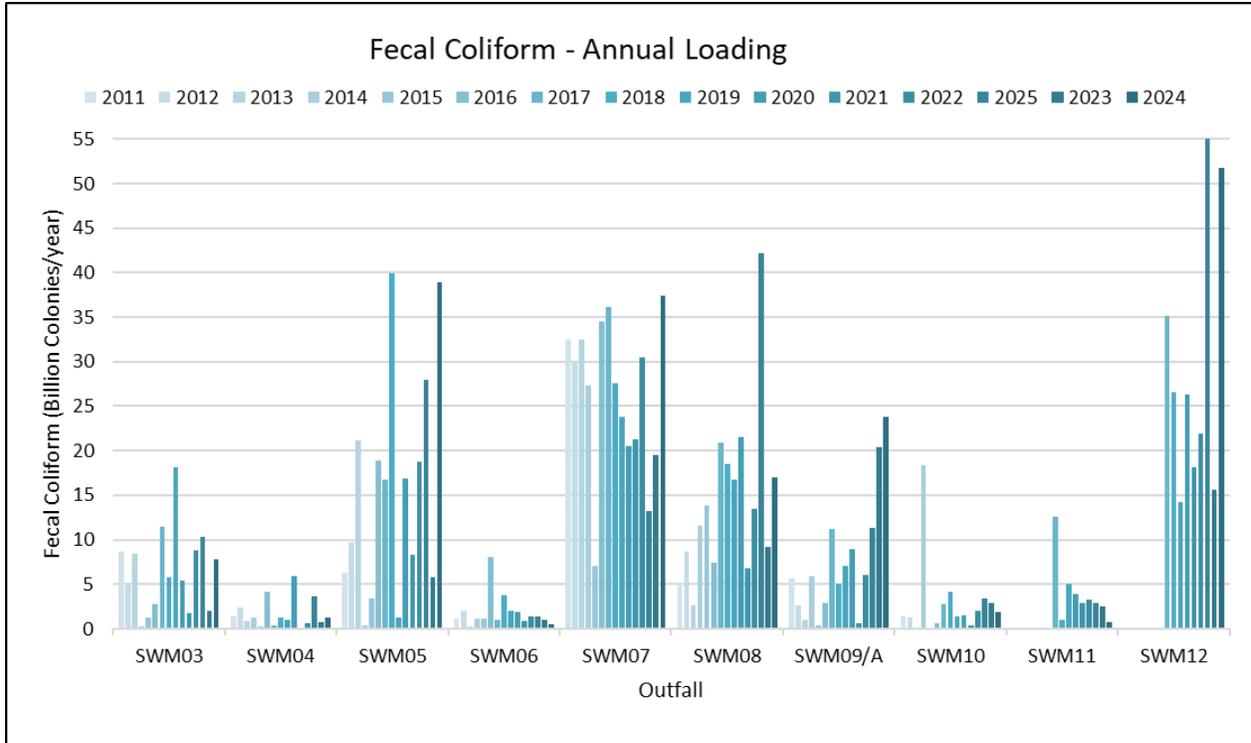
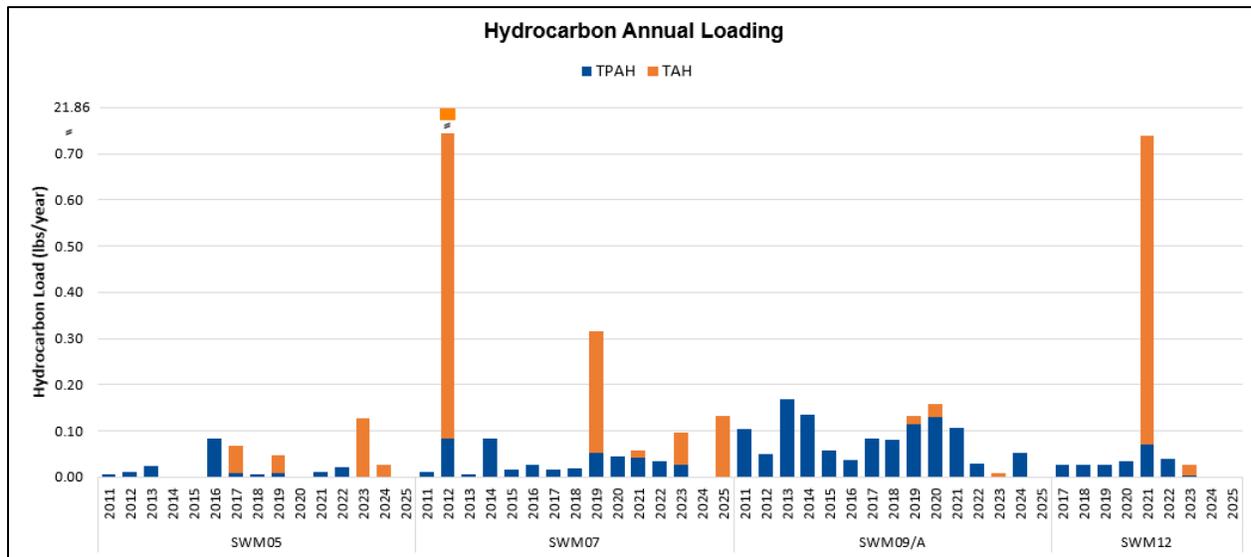


Figure 30. Fecal Coliform Annual Loading by Monitoring Site.



Note that the y-axis is non-linear.

Figure 31. Hydrocarbon Annual Loading by Monitoring Site.

SWM07 has had the highest annual fecal coliform loading concentration nine of the 15 years sampling has occurred. In 2025, SWM07, which represents a commercial/industrial land use area, had an annual fecal coliform loading estimate of 13.2 billion colonies/year. In 2025, SWM12 had the largest annual fecal coliform loading at 74.2 billion colonies/year, SWM08 had the second at 42.2 billion colonies/year, and SWM05 had the third at 28.0 billion colonies/year. The lowest fecal loading

estimate was at SWM06 at 1.4 billion colonies/year. Fecal coliform counts and subsequent annual loading estimates continue to be highly variable and continued sampling will be required to identify trends at these outfalls.

As determined by TAH and TPAH measurements, annual hydrocarbon loading estimates for 2025 were down significantly at all sites compared to past measurements. In 2025, there was one TAH constituent detection compared to one in 2024, three in 2023, and zero in 2022. In 2019 through 2021 where there were between four and seven detections. For TPAH, no samples detected TPAH constituents, compared to one in 2024, four in 2023 and 14 in 2022. One factor that may be driving these lower hydrocarbon detections and subsequent annual loading estimates could be the effectiveness of ongoing monitoring and management efforts, as precipitation in 2025 was within normal ranges and unlikely to have influenced flushing of accumulated hydrocarbons prior to sampling. This suggests that 2025 may be representative of typical conditions. Continued monitoring will be required to determine if the decrease in hydrocarbon concentrations is part of a broader trend.

## 4.0 Summary and Conclusions

This report details the findings of the 2025 Municipality of Anchorage (MOA) stormwater monitoring program (SWM Program), satisfying the requirements of the current municipal MS4 permit (Permit No. AKS-052558). The Anchorage MS4 permit establishes control measures and requires the development of programs designed to prevent contaminants from entering the storm sewer system. The permit further identifies monitoring objectives, including stormwater outfall monitoring (Section 4.1.7 of the MS4 permit). The stormwater outfall monitoring program monitors 10 priority outfall locations that represent a variety of major land use areas within the Anchorage Bowl. The SWM Program tests these outfall locations at least four times each year during storm events for specific physical and chemical parameters. The stormwater sampling conducted during 2025 represents the 15<sup>th</sup> year of outfall monitoring under the current SWM Program.

The 2025 SWM Program successfully sampled four storm events at the 10 priority outfall locations included in the monitoring program. This year's sampling events occurred on August 7, August 28, September 5, and September 11. Precipitations over the sampling period was within normal ranges, with Storm 2 being the largest event.

Overall, sample results fell generally within AWQS criteria and in line with the results of previous monitoring years. None of the samples tested present any immediate concerns for the tested parameters. The data record was investigated to look for systemic differences between outfall sites and for seasonal and multi-year trends.

Fecal coliform levels measured as part of the 2025 SWM Program were comparatively higher than the historical ranges for the program. In 2025, SWM12 had the highest annual fecal coliform loading, estimated at 74.2 billion colonies annually. Historically, SWM07 has had the highest annual fecal coliform loading; but in 2025 was estimated at 13.2 billion colonies and the third highest annual fecal coliform loading. In contrast, SWM06 had the lowest calculated annual fecal coliform loading estimate in the analysis.

Annual hydrocarbon loading estimates for TAH detection in the 2025 program were notably lower than in previous years. TPAH were not detected during 2025 monitoring. No patterns in the data indicate cause for concern or fall outside historical norms. Continued monitoring will be necessary to determine whether ongoing hydrocarbon detections reflect a broader trend.

## 5.0 References

- ADEC 2020. Authorization to Discharge under the Alaska Pollutant Discharge Elimination System, Permit No. Anchorage Municipal Separate Storm Sewer System, Individual Permit AKS052558. Permit Issued to the Municipality of Anchorage and the Alaska Department of Transportation and Public Facilities. June 23, 2020.
- ADEC 2020b. Fact Sheet for APDES Permit No. AKS-052558. June 23, 2020.
- ADEC 2018. State of Alaska 2014/2016 Final Integrated Water Quality Monitoring and Assessment Report. November 2, 2018.
- EPA 1983. Results of the Nationwide Urban Runoff Program. Water Planning Division, PB 84-185552, Washington, D.C., December 1983.
- EPA 2009. Authorization to Discharge under the National Pollutant Discharge Elimination System, Permit No. AKS-052558. Permit Issued to the Municipality of Anchorage and the Alaska Department of Transportation and Public Facilities. October 29, 2009.
- MOA 2003. Fecal Coliform in Anchorage Streams: Sources and Transport Processes. Document APg03001. September 2003.
- MOA 2020. Monitoring, Evaluation, and Quality Assurance Plan, APDES Permit No. AKS052558. Prepared for Alaska Department of Environmental Conservation, Division of Water. Prepared by HDR Alaska, Inc. and Municipality of Anchorage. 2020.
- NOAA 2020. National Oceanic and Atmospheric Administration. Monthly Precipitation Normals for Ted Stevens Anchorage International Airport, 1991-2020. Accessed at <https://www.ncei.noaa.gov/products/land-based-station/us-climate-normals/> on October 27, 2021.
- NOAA 2025. National Oceanic and Atmospheric Administration National Centers for Environmental Information. Accessed at <https://www.ncdc.noaa.gov/cdo-web/> on October 18, 2025.
- NWS 2025a. National Weather Service, Weather Conditions For: KTUA2 Anchorage Midtown, AK. Accessed at <https://www.weather.gov/wrh/timeseries?site=KTUA2>.
- NWS 2025b. National Weather Service Forecast office, Anchorage, AK. Monthly Weather Summary. Anchorage. Data downloaded from <https://www.weather.gov/wrh/Climate?wfo=afc> on October 1, 2025.
- SMRC 2010. Stormwater Managers Resource Center. Monitoring and Assessment Guidance, The Simple Method. Website: <http://www.stormwatercenter.net>



*This page intentionally left blank.*

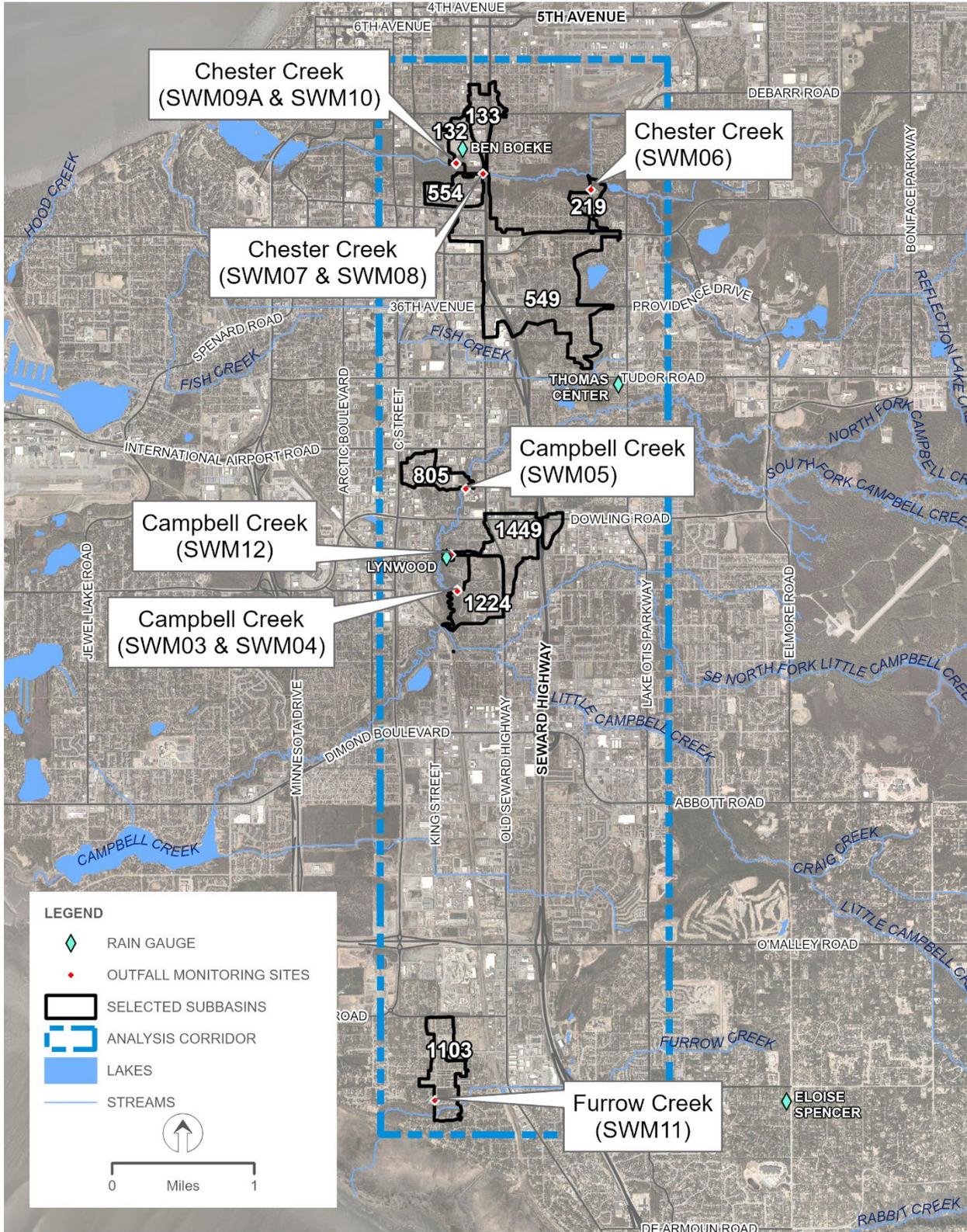


# **Appendix A**

## **Outfall Site Maps**

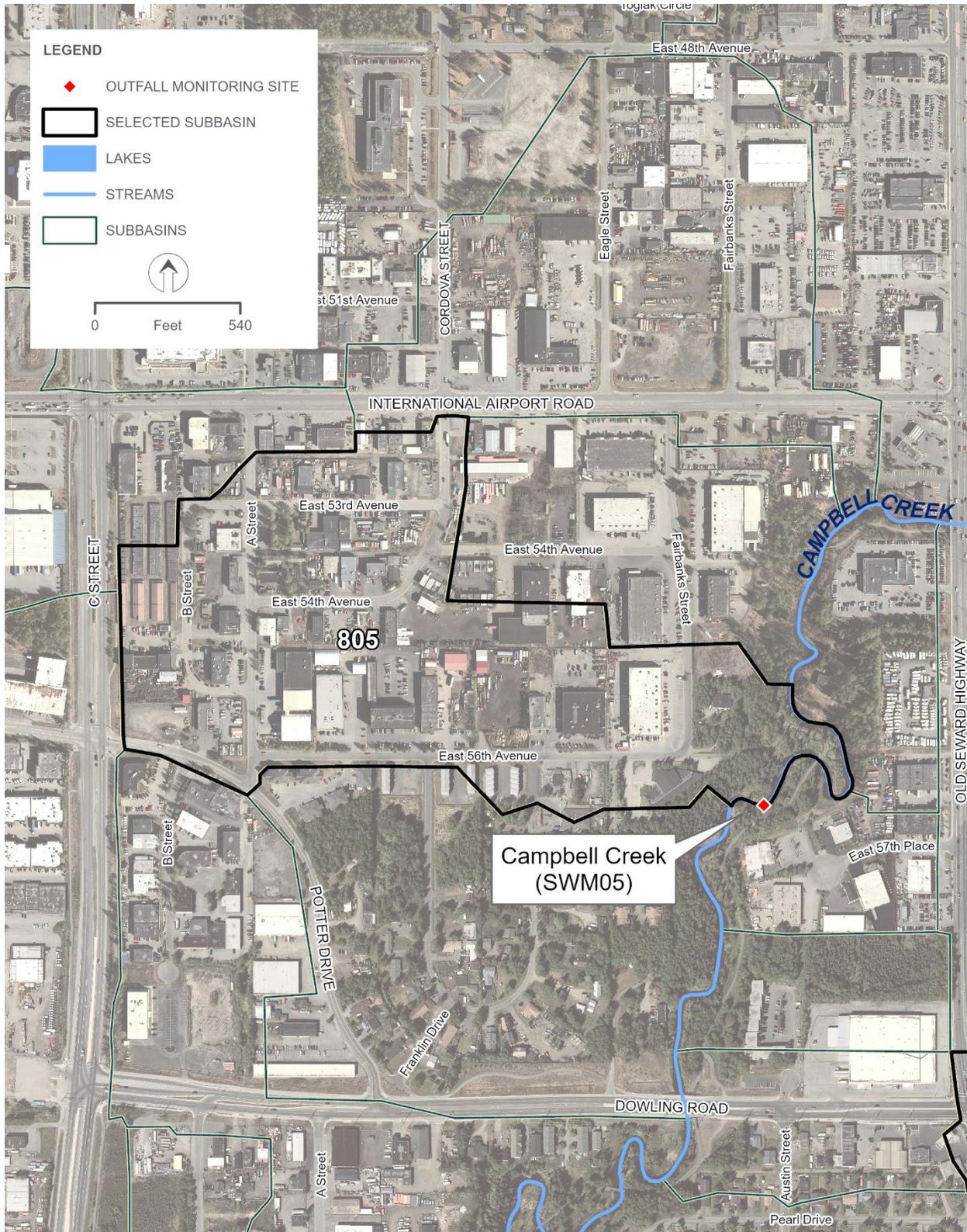


*This page intentionally left blank.*



**MOA STORMWATER OUTFALL MONITORING  
TEN PRIORITY OUTFALL MONITORING SITES**

FIGURE 1



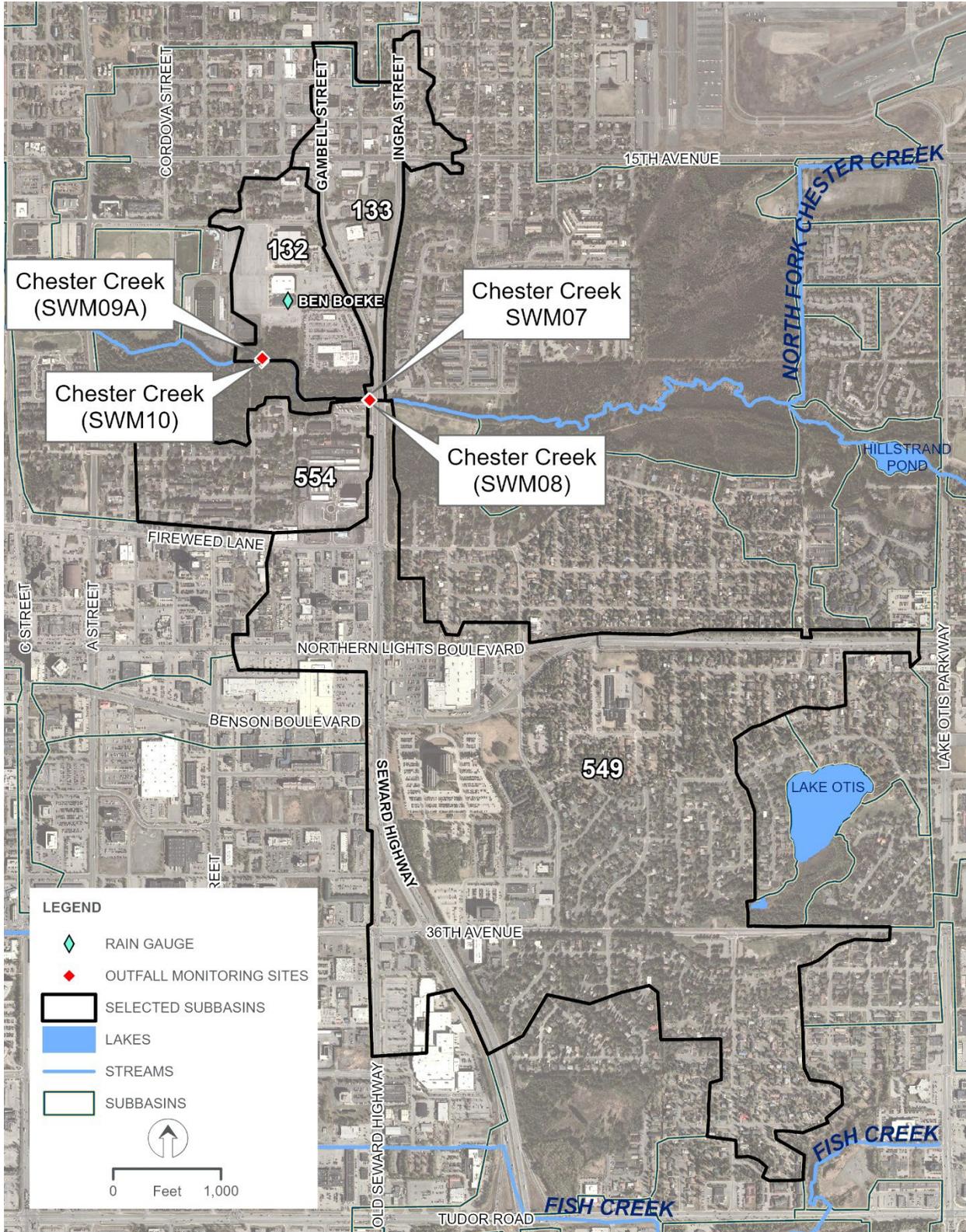
**MOA STORMWATER OUTFALL MONITORING  
SAMPLING STATION SWM05, UPDATED SUBBASIN 805**

FIGURE 2



**MOA STORMWATER OUTFALL MONITORING  
 SAMPLING STATION SWM06, UPDATED SUBBASIN 219**

**FIGURE 3**



**MOA STORMWATER OUTFALL MONITORING SAMPLING STATIONS SWM07, SWM08, SWM09 AND SWM10, UPDATED SUBBASINS 132, 133, 549, AND 554**

FIGURE 4





**MOA STORMWATER OUTFALL MONITORING SAMPLING STATION SWM11, UPDATED SUBBASIN 1103**

WATERSHED MANAGEMENT

FIGURE 5

PATH: Z:\07964 ANCH DPW\10343181\_2022 SWM ANALYSIS AND REPORT\7.2\_WIP\MAP\_DOCS\SWM\_2022.APRX - USER: SNORTON - DATE: 12/9/2022



**MOA STORMWATER OUTFALL MONITORING  
SAMPLING STATIONS SWM03, SWM04, AND SWM12,  
UPDATED SUBBASINS 1224 AND 1449**

FIGURE 6



*This page intentionally left blank.*



# **Appendix B**

## **Photographs**



*This page intentionally left blank.*



**Photograph 1. Outfall SWM03 (1224-1), Fairweather Loop off Sylvan Drive.**



**Photograph 2. Outfall SWM04 (1224-2), Fairweather Loop off Sylvan Drive.**



**Photograph 3. Outfall SWM05 (207-1), East 56<sup>th</sup> Avenue at Save School.**



**Photograph 4. Outfall SWM06 (314-22), Maplewood Street off of Northern Lights Boulevard.**



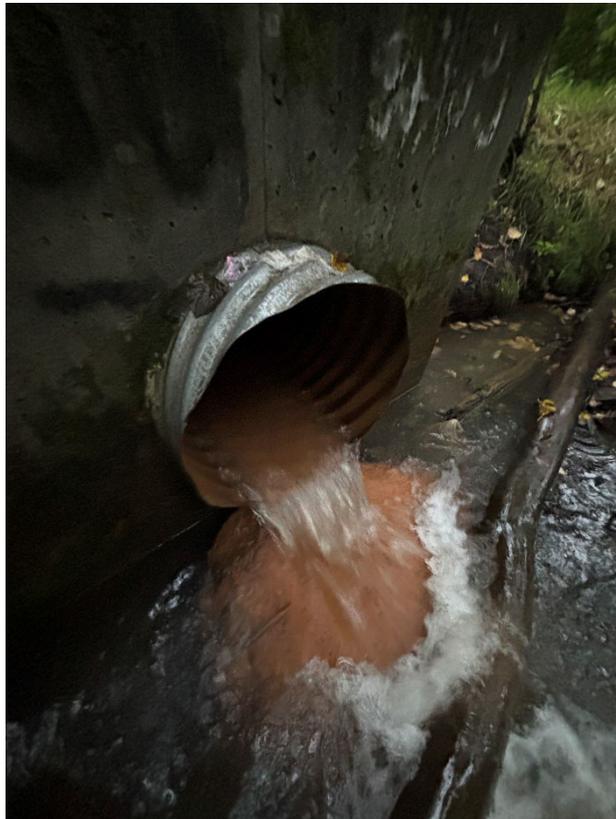
**Photograph 5. Outfall SWM07 (484-1), New Seward Highway at Chester Creek.**



**Photograph 6. Outfall SWM08 (86-1), New Seward Highway at Chester Creek.**



**Photograph 7. Outfall SWM09A (499-1), Anchorage Football Stadium & Ben Boeke Ice Arena.**



**Photograph 8. Outfall SWM10 (525-2), Eagle Street at Chester Creek.**



**Photograph 9. Outfall SWM11 (348-3), Johns Road at Botanical Circle.**



**Photograph 10. Outfall SWM12 (1454-1), Lynwood Retention Basin.**



*This page intentionally left blank.*



# **Appendix C**

## **Laboratory Data Packages and Chain of Custodies**



*This page intentionally left blank.*



**Appendix C1**  
**Laboratory Data Package**  
**Storm Event #1**



*This page intentionally left blank.*

**Alaska Laboratory AK01000**

**Client** HDR Inc

**Contact** Cindy Helmericks

**Project Name** MOA Stormwater Monitoring - Sampling 1 2025

**AWL #** AWL-25-02368

**PWS #** non PWS

Please direct any questions regarding the final report to your Project Manager [Alex@AKWaterLabs.com](mailto:Alex@AKWaterLabs.com) or [Mary@AKWaterLabs.com](mailto:Mary@AKWaterLabs.com), or call the lab for general questions.

Alaska Water Laboratories is an approved ADEC certified lab for wet chemistry and Microbiology; the results presented in this report meet the requirement of the laboratory's certifications and internal QC processes. Any exceptions will be noted in the case narratives attached. Subcontract data will be entered into AWL final reports. Full subcontract reports are available upon request.

The attached should contain analytical results for the analyses submitted on the client chain of custody. The information includes no opinions of the analysts or labs, data is represented after meeting certified testing requirements, and quality control measures.

Reproduction of the report requires the written approval of the laboratory.



Alexandria Smoot

Project Manager

08/22/2025

---

AWL Laboratory Management

Date

**Alaska Laboratory #AK01000**

Client Project Name	MOA Stormwater Monitoring - Sampling 1 2025	AWL #	AWL-25-02368
Receipt Date and Time	08/07/2025 12:15	Due Date	08/28/2025
Cooler Temperature (C)	Teal (5.9), Blue #1 (5.8), Blue #2 - cooler (6.0)	Sampler Initials	MZ
Sample receipt comments	Samples received by MCC on 08/07/2025 at 5.9C (Teal), 5.8C (Blue), and 6.0C (Blue#2) (RT#1, 136A), on frozen ice. All hardness sample pH<2. No Bubbles in any sample or TB VOA vials. Dissolved metals filtered and preserved upon receipt.		
Log In	MCC 08/07/2025	DQO	AKS 08/08/2025

**Samples Received**

Sample Location	AWL ID	Collection Date/Time	Analysis Date/Time	Analysis	Notes
SWM 03-01	AWL-25-02368-001-1	08/07/2025 09:55 AM	08/15/2025 22:40	SM2540D	
SWM 03-01	AWL-25-02368-001-1	08/07/2025 09:55 AM	08/15/2025 22:40	SM5210B BOD	
SWM 03-01	AWL-25-02368-001-2	08/07/2025 09:55 AM	08/15/2025 22:43	SM9222D Fecal Coliform by MF	
SWM 03-01	AWL-25-02368-001-3	08/07/2025 09:55 AM	8/15/25 22:40	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 03-01	AWL-25-02368-001-4	08/07/2025 09:55 AM	8/14/25 20:19	200.7	200.7 Ca, Mg ; pH<2
SWM 03-01	AWL-25-02368-001-4	08/07/2025 09:55 AM	08/21/25 13:15	SM2340B	200.7 Ca, Mg ; pH<2
SWM 04-01	AWL-25-02368-002-1	08/07/2025 09:45 AM	08/15/2025 16:54	SM5210B BOD	
SWM 04-01	AWL-25-02368-002-1	08/07/2025 09:45 AM	08/15/2025 16:54	SM2540D	
SWM 04-01	AWL-25-02368-002-2	08/07/2025 09:45 AM	08/15/2025 22:54	SM9222D Fecal Coliform by MF	

SWM 04-01	AWL-25-02368-002-3	08/07/2025 09:45 AM	8/15/25 22:43	200.8	Dissolved 200.8: Cu Sample filtered and preserved upon receipt at AWL.
SWM 04-01	AWL-25-02368-002-4	08/07/2025 09:45 AM	8/14/25 20:23	200.7	pH<2 200.7: Ca, Mg
SWM 04-01	AWL-25-02368-002-4	08/07/2025 09:45 AM	08/21/25 13:19	SM2340B	pH<2 200.7: Ca, Mg
SWM 05-01	AWL-25-02368-003-1	08/07/2025 08:55 AM	08/15/2025 23:07	SM5210B BOD	
SWM 05-01	AWL-25-02368-003-1	08/07/2025 08:55 AM	08/15/2025 23:07	SM2540D	
SWM 05-01	AWL-25-02368-003-2	08/07/2025 08:55 AM	08/15/2025 23:10	SM9222D Fecal Coliform by MF	
SWM 05-01	AWL-25-02368-003-3	08/07/2025 08:55 AM	8/15/25 22:46	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL.
SWM 05-01	AWL-25-02368-003-4	08/07/2025 08:55 AM	8/14/25 20:26	200.7	pH<2 200.7: Ca, Mg
SWM 05-01	AWL-25-02368-003-4	08/07/2025 08:55 AM	08/21/25 13:22	SM2340B	pH<2 200.7: Ca, Mg
SWM 05-01	AWL-25-02368-003-5	08/07/2025 08:55 AM	8/15/25 16:31	625 PAH	EPA 625.1 PAH
SWM 05-01	AWL-25-02368-003-6	08/07/2025 08:55 AM	8/13/25 11:10	624/624.1	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total

SWM 05-01	AWL-25-02368-003-6	08/07/2025 08:55 AM	08/22/2025 12:33	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 06-01	AWL-25-02368-004-1	08/07/2025 08:30 AM	8/11/25 14:53	SM2540D	
SWM 06-01	AWL-25-02368-004-1	08/07/2025 08:30 AM	8/11/25 14:53	SM5210B BOD	
SWM 06-01	AWL-25-02368-004-2	08/07/2025 08:30 AM	08/07/25 13:27	SM9222D Fecal Coliform by MF	
SWM 06-01	AWL-25-02368-004-3	08/07/2025 08:30 AM	8/15/25 22:49	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL.
SWM 06-01	AWL-25-02368-004-4	08/07/2025 08:30 AM	8/14/25 20:30	200.7	pH<2 200.7: Ca, Mg
SWM 06-01	AWL-25-02368-004-4	08/07/2025 08:30 AM	08/21/25 13:24	SM2340B	pH<2 200.7: Ca, Mg
SWM 07-01	AWL-25-02368-005-1	08/07/2025 07:05 AM	8/11/25 14:53	SM2540D	
SWM 07-01	AWL-25-02368-005-1	08/07/2025 07:05 AM	8/11/25 14:53	SM5210B BOD	
SWM 07-01	AWL-25-02368-005-2	08/07/2025 07:05 AM	08/07/25 13:27	SM9222D Fecal Coliform by MF	
SWM 07-01	AWL-25-02368-005-3	08/07/2025 07:05 AM	8/15/25 22:51	200.8	Dissolved 200.8: Cu Filtered and Preserved at AWL upon receipt.

SWM 07-01	AWL-25-02368-005-4	08/07/2025 07:05 AM	8/14/25 20:45	200.7	pH<2 200.7: Ca, Mg
SWM 07-01	AWL-25-02368-005-4	08/07/2025 07:05 AM	08/21/25 13:25	SM2340B	pH<2 200.7: Ca, Mg
SWM 07-01	AWL-25-02368-005-5	08/07/2025 07:05 AM	8/15/25 16:54	625 PAH	EPA 625.1 PAH
SWM 07-01	AWL-25-02368-005-6	08/07/2025 07:05 AM	8/13/25 11:32	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 07-01	AWL-25-02368-005-6	08/07/2025 07:05 AM	08/22/2025 12:33	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 08-01	AWL-25-02368-006-1	08/07/2025 07:20 AM	8/11/25 14:53	SM5210B BOD	
SWM 08-01	AWL-25-02368-006-1	08/07/2025 07:20 AM	8/11/25 14:53	SM2540D	
SWM 08-01	AWL-25-02368-006-2	08/07/2025 07:20 AM	08/07/25 13:27	SM9222D Fecal Coliform by MF	
SWM 08-01	AWL-25-02368-006-3	08/07/2025 07:20 AM	8/15/25 22:54	200.8	Dissolved 200.8: Cu Filtered and Preserved at AWL upon receipt.

SWM 08-01	AWL-25-02368-006-4	08/07/2025 07:20 AM	None	200.7	pH<2 200.7: Ca, Mg
SWM 08-01	AWL-25-02368-006-4	08/07/2025 07:20 AM	08/21/25 13:27	SM2340B	pH<2 200.7: Ca, Mg
SWM 08-01 DUP	AWL-25-02368-007-1	08/07/2025 07:25 AM	8/11/25 14:53	SM5210B BOD	
SWM 08-01 DUP	AWL-25-02368-007-1	08/07/2025 07:25 AM	8/11/25 14:53	SM2540D	
SWM 08-01 DUP	AWL-25-02368-007-2	08/07/2025 07:25 AM	08/07/25 14:42	SM9222D Fecal Coliform by MF	
SWM 08-01 DUP	AWL-25-02368-007-3	08/07/2025 07:25 AM	8/15/25 22:57	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 08-01 DUP	AWL-25-02368-007-4	08/07/2025 07:25 AM	8/14/25 20:52	200.7	pH<2 200.7: Ca, Mg
SWM 08-01 DUP	AWL-25-02368-007-4	08/07/2025 07:25 AM	08/21/25 13:28	SM2340B	pH<2 200.7: Ca, Mg
SWM 09A-01	AWL-25-02368-008-1	08/07/2025 08:00 AM	8/11/25 14:53	SM5210B BOD	
SWM 09A-01	AWL-25-02368-008-1	08/07/2025 08:00 AM	8/11/25 14:53	SM2540D	
SWM 09A-01	AWL-25-02368-008-2	08/07/2025 08:00 AM	8/14/25 20:55	SM9222D Fecal Coliform by MF	
SWM 09A-01	AWL-25-02368-008-3	08/07/2025 08:00 AM	8/15/25 22:59	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL.
SWM 09A-01	AWL-25-02368-008-4	08/07/2025 08:00 AM	None	200.7	pH<2 200.7: Ca, Mg
SWM 09A-01	AWL-25-02368-008-4	08/07/2025 08:00 AM	08/21/25 13:30	SM2340B	pH<2 200.7: Ca, Mg
SWM 09A-01	AWL-25-02368-008-5	08/07/2025 08:00 AM	8/15/25 17:17	625 PAH	EPA 625.1 PAH

SWM 09A-01	AWL-25-02368-008-6	08/07/2025 08:00 AM	8/13/25 11:53	624/624.1	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 09A-01	AWL-25-02368-008-6	08/07/2025 08:00 AM	08/22/2025 12:33	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 10-01	AWL-25-02368-009-1	08/07/2025 08:10 AM	8/11/25 14:53	SM2540D	
SWM 10-01	AWL-25-02368-009-1	08/07/2025 08:10 AM	8/11/25 14:53	SM5210B BOD	
SWM 10-01	AWL-25-02368-009-2	08/07/2025 08:10 AM	08/07/25 14:42	SM9222D Fecal Coliform by MF	
SWM 10-01	AWL-25-02368-009-3	08/07/2025 08:10 AM	8/15/25 23:07	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 10-01	AWL-25-02368-009-4	08/07/2025 08:10 AM	8/14/25 20:59	200.7	pH<2 200.7: Ca, Mg
SWM 10-01	AWL-25-02368-009-4	08/07/2025 08:10 AM	08/21/25 13:32	SM2340B	pH<2 200.7: Ca, Mg
SWM 11-01	AWL-25-02368-010-1	08/07/2025 10:15 AM	8/11/25 14:53	SM5210B BOD	

SWM 11-01	AWL-25-02368-010-1	08/07/2025 10:15 AM	8/11/25 14:53	SM2540D	
SWM 11-01	AWL-25-02368-010-2	08/07/2025 10:15 AM	08/07/25 14:42	SM9222D Fecal Coliform by MF	
SWM 11-01	AWL-25-02368-010-3	08/07/2025 10:15 AM	8/15/25 23:10	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL
SWM 11-01	AWL-25-02368-010-4	08/07/2025 10:15 AM	8/14/25 21:03	200.7	pH<2 200.7: Ca, Mg
SWM 11-01	AWL-25-02368-010-4	08/07/2025 10:15 AM	08/21/25 13:34	SM2340B	pH<2 200.7: Ca, Mg
SWM 12-01	AWL-25-02368-011-1	08/07/2025 09:20 AM	8/11/25 14:53	SM5210B BOD	
SWM 12-01	AWL-25-02368-011-1	08/07/2025 09:20 AM	8/11/25 14:53	SM2540D	
SWM 12-01	AWL-25-02368-011-2	08/07/2025 09:20 AM	08/07/25 14:42	SM9222D Fecal Coliform by MF	
SWM 12-01	AWL-25-02368-011-3	08/07/2025 09:20 AM	8/15/25 23:13	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL. Primary, MS/ MSD - xvol sent
SWM 12-01	AWL-25-02368-011-4	08/07/2025 09:20 AM	8/14/25 21:06	200.7	pH<2 200.7: Ca, Mg Primary, MS/ MSD - xvol sent
SWM 12-01	AWL-25-02368-011-4	08/07/2025 09:20 AM	08/21/25 13:35	SM2340B	pH<2 200.7: Ca, Mg Primary, MS/ MSD - xvol sent
SWM 12-01	AWL-25-02368-011-5	08/07/2025 09:20 AM	8/15/25 17:40	625 PAH	EPA 625.1 PAH Primary, MS/ MSD - xvol sent

SWM 12-01	AWL-25-02368-011-6	08/07/2025 09:20 AM	8/13/25 10:49	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary, MS/ MSD - xvold sent
SWM 12-01	AWL-25-02368-011-6	08/07/2025 09:20 AM	08/22/2025 12:33	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary, MS/ MSD - xvold sent
SWM 12-01 DUP	AWL-25-02368-012-1	08/07/2025 09:30 AM	8/11/25 14:53	SM2540D	
SWM 12-01 DUP	AWL-25-02368-012-1	08/07/2025 09:30 AM	8/11/25 14:53	SM5210B BOD	
SWM 12-01 DUP	AWL-25-02368-012-2	08/07/2025 09:30 AM	08/07/25 14:42	SM9222D Fecal Coliform by MF	
SWM 12-01 DUP	AWL-25-02368-012-3	08/07/2025 09:30 AM	8/15/25 23:26	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 12-01 DUP	AWL-25-02368-012-4	08/07/2025 09:30 AM	8/14/25 21:18	200.7	pH<2 200.7: Ca, Mg
SWM 12-01 DUP	AWL-25-02368-012-4	08/07/2025 09:30 AM	08/21/25 13:37	SM2340B	pH<2 200.7: Ca, Mg

SWM 12-01 DUP	AWL-25-02368-012-5	08/07/2025 09:30 AM	8/15/25 18:48	625 PAH	EPA 625.1 PAH
SWM 12-01 DUP	AWL-25-02368-012-6	08/07/2025 09:30 AM	8/13/25 12:15	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 12-01 DUP	AWL-25-02368-012-6	08/07/2025 09:30 AM	08/22/2025 12:33	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
Trip Blank	AWL-25-02368-013-1	08/07/2025 07:05 AM	8/13/25 9:22	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - Trip Blank

Trip Blank	AWL-25-02368-013-1	08/07/2025 07:05 AM	08/22/2025 12:33	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - Trip Blank
------------	--------------------	---------------------	------------------	----------------------	---

**Analytical Methods**

Analyte	Analytical Method	Comments
BOD	SM5210B BOD	BOD Batch 080825-01-BOD: LCS for the batch was outside of control limits and notated with a "Q" qualifier flag. All results on the batch are considered bias low and are notated with a "Q" flag; All results on the batch were comparable to their last historical results and are considered reportable; All other QC met method criteria. SMK 08/13/2025
Fecal Coliform	SM9222D Fecal Coliform by MF	
Ca, Mg	200.7	
Cu	200.8	
624 TAH	624 TAH	
625 PAH	625 PAH	
TAqH and TAH	Calculation	
Hardness	SM2340B Total Hardness	
TSS	SM2540D Total Suspended Solids	

Certification: Alaska Wastewater  
CMDP Job ID: NA

Comments: Extra Volume goes to sublab for MS/MSD with SWM 12-01 sample for metals and 624/625 - AKS 8/8/25  
Include lab QC in Report

**Alaska Laboratory #AK01000**

**Definitions:**

DUP: Sample Duplicate  
LCS/LCSD: Laboratory Control Sample/Laboratory Control Sample Duplicate  
MRL: Method Reporting Limit  
MB: Method Blank  
MCL: Maximum Contaminant Limit  
MDL: Method Detection Limit  
MS/MSD: Matrix Spike/Matrix Spike Duplicate  
N/A: Not Applicable  
TNTC: Cell count is Too Numerous To Count  
<MDL: Result recovery is below the laboratory detectable limit, listed as the MDL.

**Data Qualifiers:**

B: The result of both the method blank and the target sample were recovered above the MDL.  
D: Sample was diluted prior to analysis.  
J: The reported result was recovered below the MRL (Method Reporting Limit), but above the MDL (Method Detection Limit), and should be considered an estimate.  
U: Result was recovered below the MDL, MRL, LOD, and LOQ.  
\*: The LCS/LCSD or DUP was recovered outside method specified control limits.  
H: Sample was received or analyzed outside of method specified holding time.  
E: Sample recovery is equal to or exceeded the MCL.  
Q: One or more Quality Control criteria was recovered outside of control limits.

**General Comments:**

1.0) Basis: "As Received" = Analyzed as received from client. "Dry" = dried prior to being analyzed. "Dry Weight Corrected" = analyzed as received, result corrected for percent moisture.

**Alaska Laboratory #AK01000**

**Analytical Results**

Client HDR Inc Project MOA Stormwater Monitoring - Sampling 1 2025

Contact Cindy Helmericks PWS # non PWS

Project MOA Stormwater Monitoring - Sampling 1 2025

Sample Location: SWM 03-01 Collection Date/Time: 08/07/2025 09:55 AM

AWL ID/ Fraction: AWL-25-02368-001-1 Matrix WW Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	4.73	mg/L	1.5	0.45		Q	1.5	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 03-01 SPID: n/a Collection Date/Time: 08/07/2025 09:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-001-1 Matrix WW Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	21.64	mg/L	17.25	7.75		1.55		SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 03-01 Collection Date/Time: 08/07/2025 09:55 AM

AWL ID/ Fraction: AWL-25-02368-001-2 Matrix WW Batch ID: 080725-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Anaylst Initials
Fecal Coliform	2200.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/07/25 13:27	SMK

Comments: Competing bacteria. SMK 08/08/25

Sample Location: SWM 03-01 SPID: n/a Collection Date/Time: 08/07/2025 09:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-001-3 Matrix WW Sub Lab ID: 280-211754-1

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.8	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 22:40

Comments:

Sample Location: SWM 03-01 SPID: n/a Collection Date/Time: 08/07/2025 09:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-001-4 Matrix WW Sub Lab ID: 280-211754-1

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	19000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:19
Magnesium	5800	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:19

Comments:

Sample Location: SWM 03-01 SPID: n/a Collection Date/Time: 08/07/2025 09:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-001-4 Matrix WW Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	71.33	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:15

Comments:

Sample Location: SWM 04-01 Collection Date/Time: 08/07/2025 09:45 AM

AWL ID/ Fraction: AWL-25-02368-002-1 Matrix WW Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	3.61	mg/L	1.5	0.45			Q 1.5	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 04-01 SPID: n/a Collection Date/Time: 08/07/2025 09:45 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-002-1 Matrix WW Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	17.43	mg/L	18.14	8.15		1.63	J	SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 04-01 Collection Date/Time: 08/07/202 09:45 AM

AWL ID/ Fraction: AWL-25-02368-002-2 Matrix WW Batch ID: 080725-01-FC

Analyte	Result	Units	MDL	MCL	DF	Flags	Method	Date/Time	Analyst Initials
Fecal Coliform	954.55	CFU/100mL	9.09		9.09		SM9222D Fecal by MF	08/07/25 13:27	SMK

Comments: Competing bacteria. SMK 08/08/25

Sample Location: SWM 04-01 SPID: n/a Collection Date/Time: 08/07/2025 09:45 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-002-3 Matrix WW Sub Lab ID: 280-211754-2

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.2	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 22:43

Comments:

Sample Location: SWM 04-01 SPID: n/a Collection Date/Time: 08/07/2025 09:45 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-002-4 Matrix WW Sub Lab ID: 280-211754-2

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	22000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:23
Magnesium	5400	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:23

Comments:

Sample Location: SWM 04-01 SPID: n/a Collection Date/Time: 08/07/2025 09:45 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-002-4 Matrix WW Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	77.17	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:19

Comments:

Sample Location: SWM 05-01 Collection Date/Time: 08/07/2025 08:55 AM

AWL ID/ Fraction: AWL-25-02368-003-1 Matrix WW Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	9.06	mg/L	1.5	0.45		Q	1.5	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 05-01 SPID: n/a Collection Date/Time: 08/07/2025 08:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-003-1 Matrix WW Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	41.80	mg/L	22.25	10		2		SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 05-01 Collection Date/Time: 08/07/2025 08:55 AM

AWL ID/ Fraction: AWL-25-02368-003-2 Matrix WW Batch ID: 080725-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	3700.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/07/25 13:27	SMK

Comments:

Competing bacteria. SMK 08/08/25

Sample Location: SWM 05-01 SPID: n/a Collection Date/Time: 08/07/2025 08:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-003-3 Matrix WW Sub Lab ID: 280-211754-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.9	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 22:46

Comments:

Sample Location: SWM 05-01 SPID: n/a Collection Date/Time: 08/07/2025 08:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-003-4 Matrix WW Sub Lab ID: 280-211754-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	10000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:26
Magnesium	2000	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:26

Comments:

Sample Location: SWM 05-01 SPID: n/a Collection Date/Time: 08/07/2025 08:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-003-4 Matrix WW Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	33.21	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:22

Comments:

Sample Location: SWM 05-01 SPID: n/a Collection Date/Time: 08/07/2025 08:55 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-003-5 Matrix WW Sub Lab ID: 280-211754-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4.1	1		1		625.1	Eurofins Denver	8/15/25 16:31
Acenaphthylene	ND	ug/L	4.1	1		1		625.1	Eurofins Denver	8/15/25 16:31
Anthracene	ND	ug/L	4.1	1		1		625.1	Eurofins Denver	8/15/25 16:31
Benzo[a]anthracene	ND	ug/L	4.1	1		1		625.1	Eurofins Denver	8/15/25 16:31
Benzo[b]fluoranthene	ND	ug/L	4.1	2.1		1		625.1	Eurofins Denver	8/15/25 16:31
Benzo[k]fluoranthene	ND	ug/L	4.1	1		1		625.1	Eurofins Denver	8/15/25 16:31

Benzo[a]pyrene	ND	ug/L	4.1	2.1	1	625.1	Eurofins Denver	8/15/25 16:31
Chrysene	ND	ug/L	4.1	1	1	625.1	Eurofins Denver	8/15/25 16:31
Dibenz(a,h)anthracene	ND	ug/L	10	4.1	1	625.1	Eurofins Denver	8/15/25 16:31
Fluoranthene	ND	ug/L	4.1	1	1	625.1	Eurofins Denver	8/15/25 16:31
Fluorene	ND	ug/L	4.1	1	1	625.1	Eurofins Denver	8/15/25 16:31
Indeno[1,2,3-cd]pyrene	ND	ug/L	10	4.1	1	625.1	Eurofins Denver	8/15/25 16:31
Naphthalene	ND	ug/L	4.1	1	1	625.1	Eurofins Denver	8/15/25 16:31
Phenanthrene	ND	ug/L	4.1	1	1	625.1	Eurofins Denver	8/15/25 16:31
Pyrene	ND	ug/L	10	4.1	1	625.1	Eurofins Denver	8/15/25 16:31
Benzo[g,h,i]perylene	ND	ug/L	4.1	2.1	1	625.1	Eurofins Denver	8/15/25 16:31

Comments:

Sample Location: SWM 05-01      SPID: n/a      Collection Date/Time: 08/07/2025 08:55 AM  
FCID: n/a  
AWL ID/ Fraction: AWL-25-02368-003-6      Matrix: WW      Sub Lab ID: 280-211754-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:10
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:10
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:10
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:10
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:10
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:10
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:10
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	8/13/25 11:10
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:10

Comments:

Sample Location: SWM 05-01      SPID: n/a      Collection Date/Time: 08/07/2025 08:55 AM  
FCID: n/a  
AWL ID/ Fraction: AWL-25-02368-003-6      Matrix: WW      Batch ID: 082225-01-TAqH/TAH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	08/22/2025 12:33
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	08/22/2025 12:33

Comments:

Sample Location: SWM 06-01      Collection Date/Time: 08/07/2025 08:30 AM  
AWL ID/ Fraction: AWL-25-02368-004-1      Matrix: WW      Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	6.75	mg/L	1.5	0.45		Q	1.5	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 06-01      SPID: n/a      Collection Date/Time: 08/07/2025 08:30 AM  
FCID: n/a  
AWL ID/ Fraction: AWL-25-02368-004-1      Matrix: WW      Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	35.40	mg/L	22.25	10		2		SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 06-01      Collection Date/Time: 08/07/2025 08:30 AM  
AWL ID/ Fraction: AWL-25-02368-004-2      Matrix: WW      Batch ID: 080725-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Anaylst Initials
Fecal Coliform	590.00	CFU/100mL	10.00			10.00	SM9222D Fecal by MF	08/07/25 13:27	SMK
Comments: Competing bacteria. HSM on 10mL plate. SMK 08/08/25									

Sample Location: SWM 06-01 SPID: n/a Collection Date/Time: 08/07/2025 08:30 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-004-3 Matrix WW Sub Lab ID: 280-211754-4

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.7	ug/L	2	1		1	J	200.8	Eurofins Denver	8/15/25 22:49

Comments:

Sample Location: SWM 06-01 SPID: n/a Collection Date/Time: 08/07/2025 08:30 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-004-4 Matrix WW Sub Lab ID: 280-211754-4

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	4600	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:30
Magnesium	1400	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:30

Comments:

Sample Location: SWM 06-01 SPID: n/a Collection Date/Time: 08/07/2025 08:30 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-004-4 Matrix WW Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	17.25	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:24

Comments:

Sample Location: SWM 07-01 Collection Date/Time: 08/07/2025 07:05 AM  
 AWL ID/ Fraction: AWL-25-02368-005-1 Matrix WW Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	21.03	mg/L	3	0.9		Q	3	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 07-01 SPID: n/a Collection Date/Time: 08/07/2025 07:05 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-005-1 Matrix WW Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	129.49	mg/L	71.32	32.05		6.41		SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 07-01 Collection Date/Time: 08/07/2025 07:05 AM  
 AWL ID/ Fraction: AWL-25-02368-005-2 Matrix WW Batch ID: 080725-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Anaylst Initials
Fecal Coliform	836.36	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/07/25 13:27	SMK

Comments: Competing bacteria. SMK 08/08/25

Sample Location: SWM 07-01 SPID: n/a Collection Date/Time: 08/07/2025 07:05 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-005-3 Matrix WW Sub Lab ID: 280-211754-5

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	5.1	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 22:51

Comments:

Sample Location: SWM 07-01      SPID: n/a      Collection Date/Time: 08/07/2025 07:05 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-005-4      Matrix: WW      Sub Lab ID: 280-211754-5

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	7300	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:45
Magnesium	2500	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:45

Comments:

Sample Location: SWM 07-01      SPID: n/a      Collection Date/Time: 08/07/2025 07:05 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-005-4      Matrix: WW      Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	28.52	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:25

Comments:

Sample Location: SWM 07-01      SPID: n/a      Collection Date/Time: 08/07/2025 07:05 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-005-5      Matrix: WW      Sub Lab ID: 280-211754-5

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Acenaphthylene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Anthracene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Benzo[a]anthracene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Benzo[b]fluoranthene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	8/15/25 16:54
Benzo[k]fluoranthene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Benzo[a]pyrene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	8/15/25 16:54
Chrysene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Dibenz(a,h)anthracene	ND	ug/L	9.5	3.8		1		625.1	Eurofins Denver	8/15/25 16:54
Fluoranthene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Fluorene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.5	3.8		1		625.1	Eurofins Denver	8/15/25 16:54
Naphthalene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Phenanthrene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 16:54
Pyrene	ND	ug/L	9.5	3.8		1		625.1	Eurofins Denver	8/15/25 16:54
Benzo[g,h,i]perylene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	8/15/25 16:54

Comments:

Sample Location: SWM 07-01      SPID: n/a      Collection Date/Time: 08/07/2025 07:05 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-005-6      Matrix: WW      Sub Lab ID: 280-211754-5

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:32
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:32
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:32
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:32

Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:32
Toluene	0.85	ug/L	1	0.25		1	J	624.1	Eurofins Denver	8/13/25 11:32
Total BTEX	0.85	ug/L	1	0.25		1	J	624.1	Eurofins Denver	8/13/25 11:32
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	8/13/25 11:32
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:32

Comments:

Sample Location: SWM 07-01 SPID: n/a Collection Date/Time 08/07/2025 07:05 AM  
FCID: n/a

AWL ID/ Fraction: AWL-25-02368-005-6 Matrix WW Batch ID: 082225-01-TAqH/TAH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	08/22/2025 12:33
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	08/22/2025 12:33

Comments: Result was under the MDL at 0.85 ug/L for TAH

Sample Location: SWM 08-01 Collection Date/Time: 08/07/2025 07:20 AM

AWL ID/ Fraction: AWL-25-02368-006-1 Matrix WW Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	15.63	mg/L	3	0.9		Q	3	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 08-01 SPID: n/a Collection Date/Time: 08/07/2025 07:20 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-006-1 Matrix WW Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	126.00	mg/L	44.51	20		4		SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 08-01 Collection Date/Time: 08/07/2025 07:20 AM

AWL ID/ Fraction: AWL-25-02368-006-2 Matrix WW Batch ID: 080725-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	1800.00	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/07/25 13:27	SMK

Comments: Competing bacteria. SMK 08/08/25

Sample Location: SWM 08-01 SPID: n/a Collection Date/Time: 08/07/2025 07:20 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-006-3 Matrix WW Sub Lab ID: 280-211754-6

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.6	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 22:54

Comments:

Sample Location: SWM 08-01 SPID: n/a Collection Date/Time: 08/07/2025 07:20 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-006-4 Matrix WW Sub Lab ID:

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	6100	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:48
Magnesium	2300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:48

Comments:

Sample Location: SWM 08-01 SPID: n/a Collection Date/Time: 08/07/2025 07:20 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-006-4 Matrix WW Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	24.70	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:27
Comments:										

Sample Location: SWM 08-01 DUP Collection Date/Time: 08/07/2025 07:25 AM

AWL ID/ Fraction: AWL-25-02368-007-1 Matrix WW Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	14.65	mg/L	3	0.9		Q	3	SM5210B	SMK	08/08/25 16:39
Comments:										

Sample Location: SWM 08-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 07:25 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-007-1 Matrix WW Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	127.20	mg/L	44.51	20		4		SM2540D	BKC	8/11/25 14:53
Comments:										

Sample Location: SWM 08-01 DUP Collection Date/Time: 08/07/2025 07:25 AM

AWL ID/ Fraction: AWL-25-02368-007-2 Matrix WW Batch ID: 080725-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials	
Fecal Coliform	1563.64	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/07/25 14:42	SMK	
Comments: Competing bacteria. SMK 08/08/25										

Sample Location: SWM 08-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 07:25 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-007-3 Matrix WW Sub Lab ID: 280-211754-7

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.6	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 22:57
Comments:										

Sample Location: SWM 08-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 07:25 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-007-4 Matrix WW Sub Lab ID: 280-211754-7

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	6000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:52
Magnesium	2200	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:52
Comments:										

Sample Location: SWM 08-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 07:25 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-007-4 Matrix WW Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	24.04	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:28
Comments:										

Sample Location: SWM 09A-01 Collection Date/Time: 08/07/2025 08:00 AM

AWL ID/ Fraction: AWL-25-02368-008-1 Matrix WW Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	24.91	mg/L	6	1.8		Q	6	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 09A-01 SPID: n/a Collection Date/Time: 08/07/2025 08:00 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-008-1 Matrix WW Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	79.60	mg/L	44.51	20		4		SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 09A-01 Collection Date/Time: 08/07/2025 08:00 AM

AWL ID/ Fraction: AWL-25-02368-008-2 Matrix WW Batch ID: 080725-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	618.18	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/07/25 14:42	SMK

Comments: Competing bacteria. SMK 08/08/25

Sample Location: SWM 09A-01 SPID: n/a Collection Date/Time: 08/07/2025 08:00 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-008-3 Matrix WW Sub Lab ID: 280-211754-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.7	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 22:59

Comments:

Sample Location: SWM 09A-01 SPID: n/a Collection Date/Time: 08/07/2025 08:00 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-008-4 Matrix WW Sub Lab ID:

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	6200	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:55
Magnesium	2100	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 20:55

Comments:

Sample Location: SWM 09A-01 SPID: n/a Collection Date/Time: 08/07/2025 08:00 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-008-4 Matrix WW Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	24.13	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:30

Comments:

Sample Location: SWM 09A-01 SPID: n/a Collection Date/Time: 08/07/2025 08:00 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-008-5 Matrix WW Sub Lab ID: 280-211754-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:17
Acenaphthylene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:17
Anthracene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:17
Benzo[a]anthracene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:17

Benzo[b]fluoranthene	ND	ug/L	3.8	1.9	1	625.1	Eurofins Denver	8/15/25 17:17
Benzo[k]fluoranthene	ND	ug/L	3.8	0.95	1	625.1	Eurofins Denver	8/15/25 17:17
Benzo[a]pyrene	ND	ug/L	3.8	1.9	1	625.1	Eurofins Denver	8/15/25 17:17
Chrysene	ND	ug/L	3.8	0.95	1	625.1	Eurofins Denver	8/15/25 17:17
Dibenz(a,h)anthracene	ND	ug/L	9.5	3.8	1	625.1	Eurofins Denver	8/15/25 17:17
Fluoranthene	ND	ug/L	3.8	0.95	1	625.1	Eurofins Denver	8/15/25 17:17
Fluorene	ND	ug/L	3.8	0.95	1	625.1	Eurofins Denver	8/15/25 17:17
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.5	3.8	1	625.1	Eurofins Denver	8/15/25 17:17
Naphthalene	ND	ug/L	3.8	0.95	1	625.1	Eurofins Denver	8/15/25 17:17
Phenanthrene	ND	ug/L	3.8	0.95	1	625.1	Eurofins Denver	8/15/25 17:17
Pyrene	ND	ug/L	9.5	3.8	1	625.1	Eurofins Denver	8/15/25 17:17
Benzo[g,h,i]perylene	ND	ug/L	3.8	1.9	1	625.1	Eurofins Denver	8/15/25 17:17

Comments:

Sample Location: SWM 09A-01      SPID: n/a      Collection Date/Time: 08/07/2025 08:00 AM  
FCID: n/a

AWL ID/ Fraction: AWL-25-02368-008-6      Matrix: WW      Sub Lab ID: 280-211754-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:53
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:53
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:53
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:53
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:53
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:53
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:53
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	8/13/25 11:53
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 11:53

Comments:

Sample Location: SWM 09A-01      SPID: n/a      Collection Date/Time: 08/07/2025 08:00 AM  
FCID: n/a

AWL ID/ Fraction: AWL-25-02368-008-6      Matrix: WW      Batch ID: 082225-01-TAqH/TAH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	08/22/2025 12:33
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	08/22/2025 12:33

Comments:

Sample Location: SWM 10-01      Collection Date/Time: 08/07/2025 08:10 AM  
AWL ID/ Fraction: AWL-25-02368-009-1      Matrix: WW      Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	6.39	mg/L	1.5	0.45		Q	1.5	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 10-01      SPID: n/a      Collection Date/Time: 08/07/2025 08:10 AM  
FCID: n/a

AWL ID/ Fraction: AWL-25-02368-009-1      Matrix: WW      Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	42.48	mg/L	27.04	12.15		2.43		SM2540D	BKC	8/11/25 14:53

Comments:



FCID: n/a  
Matrix: WW  
AWL ID/ Fraction: AWL-25-02368-010-3  
Sub Lab ID: 280-211754-10

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.0	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 23:10

Comments:

Sample Location: SWM 11-01  
SPID: n/a  
FCID: n/a  
Collection Date/Time: 08/07/2025 10:15 AM  
AWL ID/ Fraction: AWL-25-02368-010-4  
Matrix: WW  
Sub Lab ID: 280-211754-10

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	12000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 21:03
Magnesium	1700	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 21:03

Comments:

Sample Location: SWM 11-01  
SPID: n/a  
FCID: n/a  
Collection Date/Time: 08/07/2025 10:15 AM  
AWL ID/ Fraction: AWL-25-02368-010-4  
Matrix: WW  
Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	36.96	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:34

Comments:

Sample Location: SWM 12-01  
Collection Date/Time: 08/07/2025 09:20 AM  
AWL ID/ Fraction: AWL-25-02368-011-1  
Matrix: WW  
Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	13.21	mg/L	3	0.9		Q	3	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 12-01  
SPID: n/a  
FCID: n/a  
Collection Date/Time: 08/07/2025 09:20 AM  
AWL ID/ Fraction: AWL-25-02368-011-1  
Matrix: WW  
Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	54.00	mg/L	44.51	20		4		SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 12-01  
Collection Date/Time: 08/07/2025 09:20 AM  
AWL ID/ Fraction: AWL-25-02368-011-2  
Matrix: WW  
Batch ID: 080725-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	9000.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/07/25 14:42	SMK

Comments:

Competing bacteria. SMK 08/08/25

Sample Location: SWM 12-01  
SPID: n/a  
FCID: n/a  
Collection Date/Time: 08/07/2025 09:20 AM  
AWL ID/ Fraction: AWL-25-02368-011-3  
Matrix: WW  
Sub Lab ID: 280-211754-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	6.7	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 23:13

Comments:

Sample Location: SWM 12-01  
SPID: n/a  
Collection Date/Time: 08/07/2025 09:20 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-011-4

Matrix WW

Sub Lab ID: 280-211754-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	20000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 21:06
Magnesium	5400	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 21:06

Comments:

Sample Location: SWM 12-01

SPID: n/a

Collection Date/Time: 08/07/2025 09:20 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-011-4

Matrix WW

Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	72.18	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:35

Comments:

Sample Location: SWM 12-01

SPID: n/a

Collection Date/Time: 08/07/2025 09:20 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-011-5

Matrix WW

Sub Lab ID: 280-211754-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Acenaphthylene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Anthracene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Benzo[a]anthracene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Benzo[b]fluoranthene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	8/15/25 17:40
Benzo[k]fluoranthene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Benzo[a]pyrene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	8/15/25 17:40
Chrysene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Dibenz(a,h)anthracene	ND	ug/L	9.5	3.8		1		625.1	Eurofins Denver	8/15/25 17:40
Fluoranthene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Fluorene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.5	3.8		1		625.1	Eurofins Denver	8/15/25 17:40
Naphthalene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Phenanthrene	ND	ug/L	3.8	0.95		1		625.1	Eurofins Denver	8/15/25 17:40
Pyrene	ND	ug/L	9.5	3.8		1		625.1	Eurofins Denver	8/15/25 17:40
Benzo[g,h,i]perylene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	8/15/25 17:40

Comments:

Sample Location: SWM 12-01

SPID: n/a

Collection Date/Time: 08/07/2025 09:20 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-011-6

Matrix WW

Sub Lab ID: 280-211754-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 10:49
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 10:49
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 10:49
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 10:49
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 10:49
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 10:49
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 10:49
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	8/13/25 10:49
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 10:49

Comments:

Sample Location: SWM 12-01 SPID: n/a Collection Date/Time 08/07/2025 09:20 AM  
FCID: n/a

AWL ID/ Fraction: AWL-25-02368-011-6 Matrix WW Batch ID: 082225-01-TAqH/TAH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	08/22/2025 12:33
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	08/22/2025 12:33

Comments:

Sample Location: SWM 12-01 DUP Collection Date/Time: 08/07/2025 09:30 AM

AWL ID/ Fraction: AWL-25-02368-012-1 Matrix WW Batch ID: 080825-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	11.51	mg/L	3	0.9		Q	3	SM5210B	SMK	08/08/25 16:39

Comments:

Sample Location: SWM 12-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 09:30 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-012-1 Matrix WW Batch ID: 081125-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	67.60	mg/L	44.51	20		4		SM2540D	BKC	8/11/25 14:53

Comments:

Sample Location: SWM 12-01 DUP Collection Date/Time: 08/07/2025 09:30 AM

AWL ID/ Fraction: AWL-25-02368-012-2 Matrix WW Batch ID: 080725-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	9200.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/07/25 14:42	SMK

Comments:

Competing bacteria. SMK 08/08/25

Sample Location: SWM 12-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 09:30 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-012-3 Matrix WW Sub Lab ID: 280-211754-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	5.8	ug/L	2	1		1		200.8	Eurofins Denver	8/15/25 23:26

Comments:

Sample Location: SWM 12-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 09:30 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-012-4 Matrix WW Sub Lab ID: 280-211754-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	19000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 21:18
Magnesium	5300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	8/14/25 21:18

Comments:

Sample Location: SWM 12-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 09:30 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-012-4 Matrix WW Batch ID: 082125-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	69.27	mg/L CaCO3	0.01	0.03		1		SM2340B Hardness	SMK	08/21/25 13:37

Comments:

Sample Location: SWM 12-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 09:30 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-012-5 Matrix WW Sub Lab ID: 280-211754-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Acenaphthylene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Anthracene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Benzo[a]anthracene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Benzo[b]fluoranthene	ND	ug/L	4.5	2.2		1		625.1	Eurofins Denver	8/15/25 18:48
Benzo[k]fluoranthene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Benzo[a]pyrene	ND	ug/L	4.5	2.2		1		625.1	Eurofins Denver	8/15/25 18:48
Chrysene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Dibenz(a,h)anthracene	ND	ug/L	11	4.5		1		625.1	Eurofins Denver	8/15/25 18:48
Fluoranthene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Fluorene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Indeno[1,2,3-cd]pyrene	ND	ug/L	11	4.5		1		625.1	Eurofins Denver	8/15/25 18:48
Naphthalene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Phenanthrene	ND	ug/L	4.5	1.1		1		625.1	Eurofins Denver	8/15/25 18:48
Pyrene	ND	ug/L	11	4.5		1		625.1	Eurofins Denver	8/15/25 18:48
Benzo[g,h,i]perylene	ND	ug/L	4.5	2.2		1		625.1	Eurofins Denver	8/15/25 18:48

Comments:

Sample Location: SWM 12-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 09:30 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-012-6 Matrix WW Sub Lab ID: 280-211754-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 12:15
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 12:15
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 12:15
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 12:15
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 12:15
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 12:15
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 12:15
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	8/13/25 12:15
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 12:15

Comments:

Sample Location: SWM 12-01 DUP SPID: n/a Collection Date/Time: 08/07/2025 09:30 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-012-6 Matrix WW Batch ID: 082225-01-TAqH/TAH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	08/22/2025 12:33
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	08/22/2025 12:33

Comments:

Sample Location: Trip Blank SPID: n/a Collection Date/Time: 08/07/2025 07:05 AM

FCID: n/a

AWL ID/ Fraction: AWL-25-02368-013-1 Matrix AQ Sub Lab ID: 280-211754-13

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 9:22
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 9:22
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 9:22
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 9:22
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 9:22
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 9:22
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 9:22
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	8/13/25 9:22
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	8/13/25 9:22
Comments:										

Sample Location: Trip Blank      SPID: n/a      Collection Date/Time: 08/07/2025 07:05 AM  
 FCID: n/a  
 AWL ID/ Fraction: AWL-25-02368-013-1      Matrix: AQ      Batch ID: 082225-01-TAqH/TAH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	08/22/2025 12:33
Comments:										

**Alaska Laboratory #AK01000**

**Analysis QC**

**BOD SM 5210B**

**Batch ID** 080825-01-BOD

**Method Blank**

Analyte	MB	Flags	MDL	MRL	CRDL	Analyst	Date/Time
BOD	0.09		0.3	0.9		SMK	08/08/25 16:39

**LCS**

Analyte	LCS	Flags	Spike Amount	Percent Recovery	Limits	Analyst	Date/Time
BOD	159.45	Q	201.0	79.33	85-115	SMK	08/08/25 16:39

**Sample Duplicate**

**Parent ID**

AWL-25-02368-011-1

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
BOD	12.71		13.21	3.86	≤30	SMK	08/08/25 16:39

**Total Suspended Solids SM2540D**

**Batch ID:** 081125-01-TSS

**Method Blank**

Analyte	MB	Flags	MDL	MRL	CRDL	Analyst	Date/Time
Total Suspended Solids	-0.30		5.00	11.13		BKC	8/11/25 14:53

**LCS**

Analyte	LCS	Flags	Spike amount	Percent Recovery	Limits	Analyst	Date/Time
Total Suspended Solids	44.00		47.4	92.83	90-110	BKC	8/11/25 14:53

**Sample Duplicate**

**Parent ID:**

AWL-25-02360-006

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
Total Suspended Solids	10800.00		10820.00	0.19	≤20	BKC	8/11/25 14:53

**Sample Duplicate 2**

**Parent ID:**

AWL-25-02368-011-1

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
Total Suspended Solids	55.20		54.00	2.2	≤20	BKC	8/11/25 14:53



**AWL-25- 02368**  
2017-03-01,00

**Client/Company Name & Address:**  
HDR, Inc.  
582 E. 36th Ave, Suite 500  
Anchorage, AK 99503-4169

**Contact Person:** Cindy Helmericks  
**Phone No.:** 907.644.2017 (o) | 907.231.9305 (c)  
**Fax No.:** ---  
**E-mail:** [Cynthia.Helmericks@hdrinc.com](mailto:Cynthia.Helmericks@hdrinc.com)

**Public Water System (PWS) ID:**  
**Project Name/ID:** Storm #1

**Turnaround Time (TAT) for Results:**  
 Standard  Expedited (prior authorization required)  
\*Specify Requested Due Date if not standard

**Requested Date for Results:**  
**Results to STATE:** Yes  No

**Invoice Contact Name & Address & Phone:**  
HDR Inc. ATTN: Calley Hall  
582 E. 36th Ave, Suite 500, Anchorage, AK 99503-4169  
[calley.hall@hdrinc.com](mailto:calley.hall@hdrinc.com) 907-644-2123

**Account #:** \_\_\_\_\_ **Check** \_\_\_\_\_ **Credit** \_\_\_\_\_

**Quote Number** \_\_\_\_\_ **AWL #** \_\_\_\_\_

**PO/Contract No.:** 10427839, Task 1.0

Kit Preparation/Shipping Charge:	Client Sample Identification (Name, Designation, Location, etc.)	Date Sampled	Time Sampled	Matrix (DW, WW, SO)	No. of Containers	Requested Analysis/Method			Comments	
						Suspended Solids 2540D - Total	9222D - Fecal Coliform Preserv.: Na2SO4	200.8 - Dissolved Cu (Lab Filter)		EPA 200.8/2340B - Total Hardness HNO3
	1 SWM 03-01	8/7/25	09:55	WS	4	001-X	001-X	001-X		
	2 SWM 04-01	8/7/25	09:45	WS	4	002-X	002-X	002-X		
	3 SWM 05-01	8/7/25	08:55	WS	8	003-X	003-X	003-X		
	4 SWM 06-01	8/7/25	08:30	WS	4	004-X	004-X	004-X		
	5 SWM 07-01	8/7/25	07:05	WS	8	005-X	005-X	005-X		
	6 SWM 08-01	8/7/25	07:20	WS	4	006-X	006-X	006-X		
	7 SWM 08-01 Dup	8/7/25	07:25	WS	4	007-X	007-X	007-X		Field Dup
	8 SWM 09A-01	8/7/25	08:00	WS	8	008-X	008-X	008-X		
	9 SWM 10-01	8/7/25	08:10	WS	4	009-X	009-X	009-X		
	10 SWM 11-01	8/7/25	10:15	WS	4	010-X	010-X	010-X		

**Section To Be Completed by AWL**

**Relinquished by:** \_\_\_\_\_ **Date:** 8/7/25 **Time:** 12:20

**Relinquished by:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

**Relinquished by:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

**Name of Sampler: (printed)** Margaret Zhu

**Custody Seal (circle):** Intact  Broken

**Temperature on arrival:** \_\_\_\_\_ °C

**Temp**  TB  Cooler  Ice  Frozen  Wet

**Thermo ID** RT1

**Receiv. Notes:** Teal = VOA = 5.7C (RT-1)  
Blue #1 = 5.8C (RT-1) 136A  
Blue #2 = 7.2 136A

**Delivery Method (Circle):** Courier  USPS/Mail  Hand

**Hand** \_\_\_\_\_

*See rec' notes*

*Call hardness pH & a*

*No VOA bubbles.*



Client/Company Name & Address: HDR Inc. 582 E. 36th Ave. Suite 500 Anchorage, AK 99503-4169		Public Water System (PWS) ID: Project Name/ID:		AWL Staff Quote Number AWL #	
Contact Person: Cindy Helmericks Phone No: 907.644.2017 (o)   907.231.9305 (c) Fax No: --- E-mail: <a href="mailto:Cynthia.Helmericks@hdrinc.com">Cynthia.Helmericks@hdrinc.com</a>		Turnaround Time (TAT) for Results <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Expedited (prior authorization required) *Specify Requested Due Date if not standard		Account #: _____ Check _____ Credit _____	
Special Instructions/Requirements:		Requested Date for Results: Results to STATE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Invoice Contact Name & Address & Phone: HDR Inc. ATTN: Calley Hall 582 E. 36th Ave. Suite 500, Anchorage, AK 99503-4169 <a href="mailto:calley.hall@hdrinc.com">calley.hall@hdrinc.com</a> 907-644-2123	
Kit Preparation/Shipping Charge:		Routine Non-Routine Specify if REPEAT sample		PO/Contract No.: 10427839, Task L0	
Client Sample Identification (Name, Designation, Location, etc.)		Suspended Solids		Requested Analysis/Method	
		2540D - Total		EPA 200.8/2340B - Total	
SWM 12-01		9222D - Fecal Coliform Preserv.: Na2SO4		EPA 624 - TAH Preservative: HCl	
SWM 12-01 DUP		5210B - BOD		EPA 625 SIM - TaqH	
SWM TripBlank-01		Matrix (DW, WW, SO)		Preservative: HNO3	
		Date Sampled		Hardness	
		Time Sampled		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Time		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	
		Received by:		Preservative: HNO3	
		Date		Hardness	
		Received by:		200.8 - Dissolved Cu (Lab Filter)	
		Date		EPA 200.8/2340B - Total	
		Received by:		Preservative: HNO3	
		Date		EPA 624 - TAH Preservative: HCl	
		Received by:		EPA 625 SIM - TaqH	
		Date		Preservative: HNO3	
		Received by:		Hardness	
		Date		200.8 - Dissolved Cu (Lab Filter)	
		Received by:		EPA 200.8/2340B - Total	
		Date		Preservative: HNO3	
		Received by:		EPA 624 - TAH Preservative: HCl	
		Date		EPA 625 SIM - TaqH	



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Mary Curry  
Alaska Water Laboratories  
281 North Main Street  
Suite 101  
Wasilla, Alaska 99654

Generated 8/19/2025 7:16:30 AM

## JOB DESCRIPTION

AWL-25-02368

## JOB NUMBER

280-211754-1

# Eurofins Denver

## 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 TestAmerica Project Manager.

## Authorization



Generated  
8/19/2025 7:16:30 AM

Authorized for release by  
Michelle Johnston, Project Manager II  
[Michelle.Johnston@et.eurofinsus.com](mailto:Michelle.Johnston@et.eurofinsus.com)  
Designee for  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Method Summary . . . . .	8
Sample Summary . . . . .	9
Client Sample Results . . . . .	10
Surrogate Summary . . . . .	19
QC Sample Results . . . . .	20
QC Association . . . . .	26
Chronicle . . . . .	29
Certification Summary . . . . .	33
Chain of Custody . . . . .	34
Receipt Checklists . . . . .	38

# Definitions/Glossary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Case Narrative

Client: Alaska Water Laboratories  
Project: AWL-25-02368

Job ID: 280-211754-1

**Job ID: 280-211754-1**

**Eurofins Denver**

## Job Narrative 280-211754-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 8/12/2025 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

### Method 624.1 - Volatile Organic Compounds (GC/MS)

Samples AWL-25-02368-003 (280-211754-3), AWL-25-02368-005 (280-211754-5), AWL-25-02368-008 (280-211754-8), AWL-25-02368-011 (280-211754-11), AWL-25-02368-011 (280-211754-11MS), AWL-25-02368-011 (280-211754-11MSD), AWL-25-02368-012 (280-211754-12) and AWL-25-02368-013 (280-211754-13) were analyzed for Volatile Organic Compounds (GC/MS). The samples were analyzed on 8/13/2025.

### Method 625.1 - Semivolatile Organic Compounds (GC/MS)

Samples AWL-25-02368-003 (280-211754-3), AWL-25-02368-005 (280-211754-5), AWL-25-02368-008 (280-211754-8), AWL-25-02368-011 (280-211754-11), AWL-25-02368-011 (280-211754-11MS), AWL-25-02368-011 (280-211754-11MSD) and AWL-25-02368-012 (280-211754-12) were analyzed for Semivolatile Organic Compounds (GC/MS). The samples were prepared on 8/14/2025 and analyzed on 8/15/2025.

### Method 200.7 Rev 4.4 - Metals (ICP)

Samples AWL-25-02368-001 (280-211754-1), AWL-25-02368-002 (280-211754-2), AWL-25-02368-003 (280-211754-3), AWL-25-02368-004 (280-211754-4), AWL-25-02368-005 (280-211754-5), AWL-25-02368-006 (280-211754-6), AWL-25-02368-007 (280-211754-7), AWL-25-02368-008 (280-211754-8), AWL-25-02368-009 (280-211754-9), AWL-25-02368-010 (280-211754-10), AWL-25-02368-011 (280-211754-11), AWL-25-02368-011 (280-211754-11MS), AWL-25-02368-011 (280-211754-11MSD) and AWL-25-02368-012 (280-211754-12) were analyzed for Metals (ICP). The samples were prepared on 8/12/2025 and analyzed on 8/14/2025.

### Method 200.8 - Metals (ICP/MS) - Dissolved

Samples AWL-25-02368-001 (280-211754-1), AWL-25-02368-002 (280-211754-2), AWL-25-02368-003 (280-211754-3), AWL-25-02368-004 (280-211754-4), AWL-25-02368-005 (280-211754-5), AWL-25-02368-006 (280-211754-6), AWL-25-02368-007 (280-211754-7), AWL-25-02368-008 (280-211754-8), AWL-25-02368-009 (280-211754-9), AWL-25-02368-010 (280-211754-10), AWL-25-02368-011 (280-211754-11), AWL-25-02368-011 (280-211754-11MS), AWL-25-02368-011 (280-211754-11MSD) and AWL-25-02368-012 (280-211754-12) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 8/12/2025 and 8/14/2025 and analyzed on 8/15/2025.

Eurofins Denver

# Detection Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Client Sample ID: AWL-25-02368-001

## Lab Sample ID: 280-211754-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	19000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	5800		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.8		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-002

## Lab Sample ID: 280-211754-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	22000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	5400		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.2		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-003

## Lab Sample ID: 280-211754-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	10000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2000		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.9		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-004

## Lab Sample ID: 280-211754-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	4600		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1400		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.7	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-005

## Lab Sample ID: 280-211754-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.85	J	1.0	0.25	ug/L	1		624.1	Total/NA
Total BTEX	0.85	J	1.0	0.25	ug/L	1		624.1	Total/NA
Calcium	7300		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2500		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	5.1		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-006

## Lab Sample ID: 280-211754-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6100		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.6		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-007

## Lab Sample ID: 280-211754-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2200		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.6		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-008

## Lab Sample ID: 280-211754-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6200		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2100		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.7		2.0	1.0	ug/L	1		200.8	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

# Detection Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Client Sample ID: AWL-25-02368-009

## Lab Sample ID: 280-211754-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	14000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	3500		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.6	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-010

## Lab Sample ID: 280-211754-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	12000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1700		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.0		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-011

## Lab Sample ID: 280-211754-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	20000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	5400		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	6.7		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-012

## Lab Sample ID: 280-211754-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	19000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	5300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	5.8		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02368-013

## Lab Sample ID: 280-211754-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Denver

# Method Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET DEN
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
625	Liquid-Liquid Extraction	EPA	EET DEN

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
280-211754-1	AWL-25-02368-001	Water	08/07/25 09:55	08/12/25 09:30	Alaska
280-211754-2	AWL-25-02368-002	Water	08/07/25 09:45	08/12/25 09:30	Alaska
280-211754-3	AWL-25-02368-003	Water	08/07/25 08:55	08/12/25 09:30	Alaska
280-211754-4	AWL-25-02368-004	Water	08/07/25 08:30	08/12/25 09:30	Alaska
280-211754-5	AWL-25-02368-005	Water	08/07/25 07:05	08/12/25 09:30	Alaska
280-211754-6	AWL-25-02368-006	Water	08/07/25 07:20	08/12/25 09:30	Alaska
280-211754-7	AWL-25-02368-007	Water	08/07/25 07:25	08/12/25 09:30	Alaska
280-211754-8	AWL-25-02368-008	Water	08/07/25 08:00	08/12/25 09:30	Alaska
280-211754-9	AWL-25-02368-009	Water	08/07/25 08:10	08/12/25 09:30	Alaska
280-211754-10	AWL-25-02368-010	Water	08/07/25 10:15	08/12/25 09:30	Alaska
280-211754-11	AWL-25-02368-011	Water	08/07/25 09:20	08/12/25 09:30	Alaska
280-211754-12	AWL-25-02368-012	Water	08/07/25 09:30	08/12/25 09:30	Alaska
280-211754-13	AWL-25-02368-013	Water	08/07/25 07:05	08/12/25 09:30	Alaska

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02368-003**

**Date Collected: 08/07/25 08:55**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:10	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:10	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:10	1
Benzene	ND		1.0	0.25	ug/L			08/13/25 11:10	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/25 11:10	1
Toluene	ND		1.0	0.25	ug/L			08/13/25 11:10	1
Total BTEX	ND		1.0	0.25	ug/L			08/13/25 11:10	1
Xylenes, Total	ND		1.0	0.25	ug/L			08/13/25 11:10	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	109		73 - 122					08/13/25 11:10	1
Toluene-d8 (Surr)	104		80 - 120					08/13/25 11:10	1
4-Bromofluorobenzene (Surr)	105		79 - 119					08/13/25 11:10	1

**Client Sample ID: AWL-25-02368-005**

**Date Collected: 08/07/25 07:05**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:32	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:32	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:32	1
Benzene	ND		1.0	0.25	ug/L			08/13/25 11:32	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/25 11:32	1
<b>Toluene</b>	<b>0.85</b>	<b>J</b>	1.0	0.25	ug/L			08/13/25 11:32	1
<b>Total BTEX</b>	<b>0.85</b>	<b>J</b>	1.0	0.25	ug/L			08/13/25 11:32	1
Xylenes, Total	ND		1.0	0.25	ug/L			08/13/25 11:32	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:32	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	108		73 - 122					08/13/25 11:32	1
Toluene-d8 (Surr)	104		80 - 120					08/13/25 11:32	1
4-Bromofluorobenzene (Surr)	108		79 - 119					08/13/25 11:32	1

**Client Sample ID: AWL-25-02368-008**

**Date Collected: 08/07/25 08:00**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:53	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:53	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:53	1
Benzene	ND		1.0	0.25	ug/L			08/13/25 11:53	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/25 11:53	1
Toluene	ND		1.0	0.25	ug/L			08/13/25 11:53	1
Total BTEX	ND		1.0	0.25	ug/L			08/13/25 11:53	1
Xylenes, Total	ND		1.0	0.25	ug/L			08/13/25 11:53	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/25 11:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	112		73 - 122					08/13/25 11:53	1
Toluene-d8 (Surr)	107		80 - 120					08/13/25 11:53	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02368-008**

**Date Collected: 08/07/25 08:00**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-8**

**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		79 - 119		08/13/25 11:53	1

**Client Sample ID: AWL-25-02368-011**

**Date Collected: 08/07/25 09:20**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 10:49	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 10:49	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 10:49	1
Benzene	ND		1.0	0.25	ug/L			08/13/25 10:49	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/25 10:49	1
Toluene	ND		1.0	0.25	ug/L			08/13/25 10:49	1
Total BTEX	ND		1.0	0.25	ug/L			08/13/25 10:49	1
Xylenes, Total	ND		1.0	0.25	ug/L			08/13/25 10:49	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/25 10:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		73 - 122		08/13/25 10:49	1
Toluene-d8 (Surr)	104		80 - 120		08/13/25 10:49	1
4-Bromofluorobenzene (Surr)	108		79 - 119		08/13/25 10:49	1

**Client Sample ID: AWL-25-02368-012**

**Date Collected: 08/07/25 09:30**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 12:15	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 12:15	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 12:15	1
Benzene	ND		1.0	0.25	ug/L			08/13/25 12:15	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/25 12:15	1
Toluene	ND		1.0	0.25	ug/L			08/13/25 12:15	1
Total BTEX	ND		1.0	0.25	ug/L			08/13/25 12:15	1
Xylenes, Total	ND		1.0	0.25	ug/L			08/13/25 12:15	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/25 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		73 - 122		08/13/25 12:15	1
Toluene-d8 (Surr)	104		80 - 120		08/13/25 12:15	1
4-Bromofluorobenzene (Surr)	107		79 - 119		08/13/25 12:15	1

**Client Sample ID: AWL-25-02368-013**

**Date Collected: 08/07/25 07:05**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 09:22	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 09:22	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 09:22	1
Benzene	ND		1.0	0.25	ug/L			08/13/25 09:22	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/25 09:22	1
Toluene	ND		1.0	0.25	ug/L			08/13/25 09:22	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02368-013**

**Date Collected: 08/07/25 07:05**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	ND		1.0	0.25	ug/L			08/13/25 09:22	1
Xylenes, Total	ND		1.0	0.25	ug/L			08/13/25 09:22	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/25 09:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		73 - 122					08/13/25 09:22	1
Toluene-d8 (Surr)	105		80 - 120					08/13/25 09:22	1
4-Bromofluorobenzene (Surr)	108		79 - 119					08/13/25 09:22	1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02368-003**

**Date Collected: 08/07/25 08:55**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Acenaphthylene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Anthracene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Benzo[a]anthracene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Benzo[b]fluoranthene	ND		4.1	2.1	ug/L		08/14/25 15:50	08/15/25 16:31	1
Benzo[k]fluoranthene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Benzo[a]pyrene	ND		4.1	2.1	ug/L		08/14/25 15:50	08/15/25 16:31	1
Chrysene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Dibenz(a,h)anthracene	ND		10	4.1	ug/L		08/14/25 15:50	08/15/25 16:31	1
Fluoranthene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Fluorene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Indeno[1,2,3-cd]pyrene	ND		10	4.1	ug/L		08/14/25 15:50	08/15/25 16:31	1
Naphthalene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Phenanthrene	ND		4.1	1.0	ug/L		08/14/25 15:50	08/15/25 16:31	1
Pyrene	ND		10	4.1	ug/L		08/14/25 15:50	08/15/25 16:31	1
Benzo[g,h,i]perylene	ND		4.1	2.1	ug/L		08/14/25 15:50	08/15/25 16:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	58		22 - 120				08/14/25 15:50	08/15/25 16:31	1
2-Fluorophenol	53		23 - 120				08/14/25 15:50	08/15/25 16:31	1
2,4,6-Tribromophenol	103		41 - 134				08/14/25 15:50	08/15/25 16:31	1
Nitrobenzene-d5	69		36 - 120				08/14/25 15:50	08/15/25 16:31	1
Phenol-d5	40		15 - 120				08/14/25 15:50	08/15/25 16:31	1
Terphenyl-d14	104		54 - 127				08/14/25 15:50	08/15/25 16:31	1

**Client Sample ID: AWL-25-02368-005**

**Date Collected: 08/07/25 07:05**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Acenaphthylene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Anthracene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Benzo[a]anthracene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Benzo[b]fluoranthene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 16:54	1
Benzo[k]fluoranthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Benzo[a]pyrene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 16:54	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02368-005**

**Date Collected: 08/07/25 07:05**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Dibenz(a,h)anthracene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 16:54	1
Fluoranthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Fluorene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Indeno[1,2,3-cd]pyrene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 16:54	1
Naphthalene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Phenanthrene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 16:54	1
Pyrene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 16:54	1
Benzo[g,h,i]perylene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 16:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	50		22 - 120				08/14/25 15:50	08/15/25 16:54	1
2-Fluorophenol	41		23 - 120				08/14/25 15:50	08/15/25 16:54	1
2,4,6-Tribromophenol	108		41 - 134				08/14/25 15:50	08/15/25 16:54	1
Nitrobenzene-d5	58		36 - 120				08/14/25 15:50	08/15/25 16:54	1
Phenol-d5	31		15 - 120				08/14/25 15:50	08/15/25 16:54	1
Terphenyl-d14	104		54 - 127				08/14/25 15:50	08/15/25 16:54	1

**Client Sample ID: AWL-25-02368-008**

**Date Collected: 08/07/25 08:00**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Acenaphthylene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Anthracene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Benzo[a]anthracene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Benzo[b]fluoranthene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 17:17	1
Benzo[k]fluoranthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Benzo[a]pyrene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 17:17	1
Chrysene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Dibenz(a,h)anthracene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 17:17	1
Fluoranthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Fluorene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Indeno[1,2,3-cd]pyrene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 17:17	1
Naphthalene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Phenanthrene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:17	1
Pyrene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 17:17	1
Benzo[g,h,i]perylene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 17:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	43		22 - 120				08/14/25 15:50	08/15/25 17:17	1
2-Fluorophenol	41		23 - 120				08/14/25 15:50	08/15/25 17:17	1
2,4,6-Tribromophenol	100		41 - 134				08/14/25 15:50	08/15/25 17:17	1
Nitrobenzene-d5	55		36 - 120				08/14/25 15:50	08/15/25 17:17	1
Phenol-d5	30		15 - 120				08/14/25 15:50	08/15/25 17:17	1
Terphenyl-d14	105		54 - 127				08/14/25 15:50	08/15/25 17:17	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02368-011**

**Date Collected: 08/07/25 09:20**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Acenaphthylene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Anthracene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Benzo[a]anthracene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Benzo[b]fluoranthene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 17:40	1
Benzo[k]fluoranthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Benzo[a]pyrene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 17:40	1
Chrysene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Dibenz(a,h)anthracene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 17:40	1
Fluoranthene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Fluorene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Indeno[1,2,3-cd]pyrene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 17:40	1
Naphthalene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Phenanthrene	ND		3.8	0.95	ug/L		08/14/25 15:50	08/15/25 17:40	1
Pyrene	ND		9.5	3.8	ug/L		08/14/25 15:50	08/15/25 17:40	1
Benzo[g,h,i]perylene	ND		3.8	1.9	ug/L		08/14/25 15:50	08/15/25 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	39		22 - 120	08/14/25 15:50	08/15/25 17:40	1
2-Fluorophenol	34		23 - 120	08/14/25 15:50	08/15/25 17:40	1
2,4,6-Tribromophenol	88		41 - 134	08/14/25 15:50	08/15/25 17:40	1
Nitrobenzene-d5	46		36 - 120	08/14/25 15:50	08/15/25 17:40	1
Phenol-d5	24		15 - 120	08/14/25 15:50	08/15/25 17:40	1
Terphenyl-d14	89		54 - 127	08/14/25 15:50	08/15/25 17:40	1

**Client Sample ID: AWL-25-02368-012**

**Date Collected: 08/07/25 09:30**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Acenaphthylene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Anthracene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Benzo[a]anthracene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Benzo[b]fluoranthene	ND		4.5	2.2	ug/L		08/14/25 15:50	08/15/25 18:48	1
Benzo[k]fluoranthene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Benzo[a]pyrene	ND		4.5	2.2	ug/L		08/14/25 15:50	08/15/25 18:48	1
Chrysene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Dibenz(a,h)anthracene	ND		11	4.5	ug/L		08/14/25 15:50	08/15/25 18:48	1
Fluoranthene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Fluorene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Indeno[1,2,3-cd]pyrene	ND		11	4.5	ug/L		08/14/25 15:50	08/15/25 18:48	1
Naphthalene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Phenanthrene	ND		4.5	1.1	ug/L		08/14/25 15:50	08/15/25 18:48	1
Pyrene	ND		11	4.5	ug/L		08/14/25 15:50	08/15/25 18:48	1
Benzo[g,h,i]perylene	ND		4.5	2.2	ug/L		08/14/25 15:50	08/15/25 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	51		22 - 120	08/14/25 15:50	08/15/25 18:48	1
2-Fluorophenol	40		23 - 120	08/14/25 15:50	08/15/25 18:48	1
2,4,6-Tribromophenol	101		41 - 134	08/14/25 15:50	08/15/25 18:48	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02368-012**  
**Date Collected: 08/07/25 09:30**  
**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-12**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	57		36 - 120	08/14/25 15:50	08/15/25 18:48	1
Phenol-d5	34		15 - 120	08/14/25 15:50	08/15/25 18:48	1
Terphenyl-d14	98		54 - 127	08/14/25 15:50	08/15/25 18:48	1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP)

**Client Sample ID: AWL-25-02368-001**  
**Date Collected: 08/07/25 09:55**  
**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	19000		200	60	ug/L		08/12/25 15:24	08/14/25 20:19	1
Magnesium	5800		200	50	ug/L		08/12/25 15:24	08/14/25 20:19	1

**Client Sample ID: AWL-25-02368-002**  
**Date Collected: 08/07/25 09:45**  
**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	22000		200	60	ug/L		08/12/25 15:24	08/14/25 20:23	1
Magnesium	5400		200	50	ug/L		08/12/25 15:24	08/14/25 20:23	1

**Client Sample ID: AWL-25-02368-003**  
**Date Collected: 08/07/25 08:55**  
**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	10000		200	60	ug/L		08/12/25 15:24	08/14/25 20:26	1
Magnesium	2000		200	50	ug/L		08/12/25 15:24	08/14/25 20:26	1

**Client Sample ID: AWL-25-02368-004**  
**Date Collected: 08/07/25 08:30**  
**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4600		200	60	ug/L		08/12/25 15:24	08/14/25 20:30	1
Magnesium	1400		200	50	ug/L		08/12/25 15:24	08/14/25 20:30	1

**Client Sample ID: AWL-25-02368-005**  
**Date Collected: 08/07/25 07:05**  
**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7300		200	60	ug/L		08/12/25 15:24	08/14/25 20:45	1
Magnesium	2500		200	50	ug/L		08/12/25 15:24	08/14/25 20:45	1

**Client Sample ID: AWL-25-02368-006**  
**Date Collected: 08/07/25 07:20**  
**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6100		200	60	ug/L		08/12/25 15:24	08/14/25 20:48	1
Magnesium	2300		200	50	ug/L		08/12/25 15:24	08/14/25 20:48	1

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP)

**Client Sample ID: AWL-25-02368-007**

**Date Collected: 08/07/25 07:25**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6000		200	60	ug/L		08/12/25 15:24	08/14/25 20:52	1
Magnesium	2200		200	50	ug/L		08/12/25 15:24	08/14/25 20:52	1

**Client Sample ID: AWL-25-02368-008**

**Date Collected: 08/07/25 08:00**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6200		200	60	ug/L		08/12/25 15:24	08/14/25 20:55	1
Magnesium	2100		200	50	ug/L		08/12/25 15:24	08/14/25 20:55	1

**Client Sample ID: AWL-25-02368-009**

**Date Collected: 08/07/25 08:10**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	14000		200	60	ug/L		08/12/25 15:26	08/14/25 20:59	1
Magnesium	3500		200	50	ug/L		08/12/25 15:26	08/14/25 20:59	1

**Client Sample ID: AWL-25-02368-010**

**Date Collected: 08/07/25 10:15**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	12000		200	60	ug/L		08/12/25 15:26	08/14/25 21:03	1
Magnesium	1700		200	50	ug/L		08/12/25 15:26	08/14/25 21:03	1

**Client Sample ID: AWL-25-02368-011**

**Date Collected: 08/07/25 09:20**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	20000		200	60	ug/L		08/12/25 15:26	08/14/25 21:06	1
Magnesium	5400		200	50	ug/L		08/12/25 15:26	08/14/25 21:06	1

**Client Sample ID: AWL-25-02368-012**

**Date Collected: 08/07/25 09:30**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	19000		200	60	ug/L		08/12/25 15:27	08/14/25 21:18	1
Magnesium	5300		200	50	ug/L		08/12/25 15:27	08/14/25 21:18	1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

**Client Sample ID: AWL-25-02368-001**

**Date Collected: 08/07/25 09:55**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.8		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:40	1

**Client Sample ID: AWL-25-02368-002**

**Date Collected: 08/07/25 09:45**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.2		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:43	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

**Client Sample ID: AWL-25-02368-003**

**Date Collected: 08/07/25 08:55**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.9		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:46	1

**Client Sample ID: AWL-25-02368-004**

**Date Collected: 08/07/25 08:30**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-4**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.7	J	2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:49	1

**Client Sample ID: AWL-25-02368-005**

**Date Collected: 08/07/25 07:05**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	5.1		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:51	1

**Client Sample ID: AWL-25-02368-006**

**Date Collected: 08/07/25 07:20**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-6**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.6		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:54	1

**Client Sample ID: AWL-25-02368-007**

**Date Collected: 08/07/25 07:25**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.6		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:57	1

**Client Sample ID: AWL-25-02368-008**

**Date Collected: 08/07/25 08:00**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.7		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:59	1

**Client Sample ID: AWL-25-02368-009**

**Date Collected: 08/07/25 08:10**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.6	J	2.0	1.0	ug/L		08/12/25 15:42	08/15/25 23:07	1

**Client Sample ID: AWL-25-02368-010**

**Date Collected: 08/07/25 10:15**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.0		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 23:10	1

**Client Sample ID: AWL-25-02368-011**

**Date Collected: 08/07/25 09:20**

**Date Received: 08/12/25 09:30**

**Lab Sample ID: 280-211754-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	6.7		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 23:13	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02368-012

Date Collected: 08/07/25 09:30

Date Received: 08/12/25 09:30

Lab Sample ID: 280-211754-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	5.8		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 23:26	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Surrogate Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DCA (73-122)	TOL (80-120)	BFB (79-119)
280-211754-3	AWL-25-02368-003	109	104	105
280-211754-5	AWL-25-02368-005	108	104	108
280-211754-8	AWL-25-02368-008	112	107	109
280-211754-11	AWL-25-02368-011	110	104	108
280-211754-11 MS	AWL-25-02368-011	111	102	103
280-211754-11 MSD	AWL-25-02368-011	108	102	105
280-211754-12	AWL-25-02368-012	111	104	107
280-211754-13	AWL-25-02368-013	111	105	108
LCS 280-708832/4	Lab Control Sample	102	100	102
LCS 280-708832/5	Lab Control Sample Dup	102	101	104
MB 280-708832/9	Method Blank	111	104	109

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)  
TOL = Toluene-d8 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (22-120)	2FP (23-120)	TBP (41-134)	NBZ (36-120)	PHL (15-120)	TPHL (54-127)
280-211754-3	AWL-25-02368-003	58	53	103	69	40	104
280-211754-5	AWL-25-02368-005	50	41	108	58	31	104
280-211754-8	AWL-25-02368-008	43	41	100	55	30	105
280-211754-11	AWL-25-02368-011	39	34	88	46	24	89
280-211754-11 MS	AWL-25-02368-011	56	40	97	56	31	89
280-211754-11 MSD	AWL-25-02368-011	60	36	90	56	29	87
280-211754-12	AWL-25-02368-012	51	40	101	57	34	98
LCS 280-709122/2-A	Lab Control Sample	66	50	95	71	36	91
MB 280-709122/1-A	Method Blank	38	49	67	70	35	87

#### Surrogate Legend

FBP = 2-Fluorobiphenyl  
2FP = 2-Fluorophenol  
TBP = 2,4,6-Tribromophenol  
NBZ = Nitrobenzene-d5  
PHL = Phenol-d5  
TPHL = Terphenyl-d14

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-708832/9**  
**Matrix: Water**  
**Analysis Batch: 708832**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 07:54	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 07:54	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			08/13/25 07:54	1
Benzene	ND		1.0	0.25	ug/L			08/13/25 07:54	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/13/25 07:54	1
Toluene	ND		1.0	0.25	ug/L			08/13/25 07:54	1
Total BTEX	ND		1.0	0.25	ug/L			08/13/25 07:54	1
Xylenes, Total	ND		1.0	0.25	ug/L			08/13/25 07:54	1
Chlorobenzene	ND		1.0	0.25	ug/L			08/13/25 07:54	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	111		73 - 122		08/13/25 07:54	1
Toluene-d8 (Surr)	104		80 - 120		08/13/25 07:54	1
4-Bromofluorobenzene (Surr)	109		79 - 119		08/13/25 07:54	1

**Lab Sample ID: LCS 280-708832/4**  
**Matrix: Water**  
**Analysis Batch: 708832**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,2-Dichlorobenzene	50.0	43.1		ug/L		86	65 - 135
1,3-Dichlorobenzene	50.0	44.9		ug/L		90	70 - 130
1,4-Dichlorobenzene	50.0	43.9		ug/L		88	65 - 135
Benzene	50.0	46.6		ug/L		93	65 - 135
Ethylbenzene	50.0	47.8		ug/L		96	60 - 140
Toluene	50.0	47.2		ug/L		94	70 - 130
Total BTEX	250	235		ug/L		94	80 - 120
Xylenes, Total	100	93.7		ug/L		94	80 - 120
Chlorobenzene	50.0	45.1		ug/L		90	65 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		73 - 122
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	102		79 - 119

**Lab Sample ID: LCSD 280-708832/5**  
**Matrix: Water**  
**Analysis Batch: 708832**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
1,2-Dichlorobenzene	50.0	45.8		ug/L		92	65 - 135	6	30
1,3-Dichlorobenzene	50.0	47.3		ug/L		95	70 - 130	5	30
1,4-Dichlorobenzene	50.0	46.6		ug/L		93	65 - 135	6	30
Benzene	50.0	47.7		ug/L		95	65 - 135	2	30
Ethylbenzene	50.0	48.6		ug/L		97	60 - 140	2	30
Toluene	50.0	48.2		ug/L		96	70 - 130	2	30
Total BTEX	250	240		ug/L		96	80 - 120	2	30
Xylenes, Total	100	95.3		ug/L		95	80 - 120	2	30

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 280-708832/5**  
**Matrix: Water**  
**Analysis Batch: 708832**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	50.0	46.0		ug/L		92	65 - 135	2	30
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	102		73 - 122						
Toluene-d8 (Surr)	101		80 - 120						
4-Bromofluorobenzene (Surr)	104		79 - 119						

**Lab Sample ID: 280-211754-11 MS**  
**Matrix: Water**  
**Analysis Batch: 708832**

**Client Sample ID: AWL-25-02368-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	ND		25.0	23.8		ug/L		95	18 - 190
1,3-Dichlorobenzene	ND		25.0	24.3		ug/L		97	59 - 156
1,4-Dichlorobenzene	ND		25.0	23.7		ug/L		95	18 - 190
Benzene	ND		25.0	25.4		ug/L		102	37 - 151
Ethylbenzene	ND		25.0	26.0		ug/L		104	37 - 162
Toluene	ND		25.0	25.3		ug/L		101	47 - 150
Total BTEX	ND		125	128		ug/L		102	80 - 120
Xylenes, Total	ND		50.0	51.3		ug/L		103	80 - 120
Chlorobenzene	ND		25.0	24.6		ug/L		99	37 - 160
<b>Surrogate</b>									
	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	111		73 - 122						
Toluene-d8 (Surr)	102		80 - 120						
4-Bromofluorobenzene (Surr)	103		79 - 119						

**Lab Sample ID: 280-211754-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 708832**

**Client Sample ID: AWL-25-02368-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichlorobenzene	ND		25.0	25.5		ug/L		102	18 - 190	7	30
1,3-Dichlorobenzene	ND		25.0	25.6		ug/L		102	59 - 156	5	30
1,4-Dichlorobenzene	ND		25.0	25.2		ug/L		101	18 - 190	6	30
Benzene	ND		25.0	26.5		ug/L		106	37 - 151	4	30
Ethylbenzene	ND		25.0	27.5		ug/L		110	37 - 162	6	30
Toluene	ND		25.0	26.3		ug/L		105	47 - 150	4	30
Total BTEX	ND		125	134		ug/L		107	80 - 120	5	30
Xylenes, Total	ND		50.0	54.0		ug/L		108	80 - 120	5	30
Chlorobenzene	ND		25.0	25.7		ug/L		103	37 - 160	4	30
<b>Surrogate</b>											
	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
1,2-Dichloroethane-d4 (Surr)	108		73 - 122								
Toluene-d8 (Surr)	102		80 - 120								
4-Bromofluorobenzene (Surr)	105		79 - 119								

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-709122/1-A**  
**Matrix: Water**  
**Analysis Batch: 709301**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 709122**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Acenaphthylene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Anthracene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Chrysene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Fluoranthene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Fluorene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Naphthalene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Phenanthrene	ND		4.0	1.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Pyrene	ND		10	4.0	ug/L		08/14/25 15:50	08/15/25 13:51	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		08/14/25 15:50	08/15/25 13:51	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl	38		22 - 120	08/14/25 15:50	08/15/25 13:51	1
2-Fluorophenol	49		23 - 120	08/14/25 15:50	08/15/25 13:51	1
2,4,6-Tribromophenol	67		41 - 134	08/14/25 15:50	08/15/25 13:51	1
Nitrobenzene-d5	70		36 - 120	08/14/25 15:50	08/15/25 13:51	1
Phenol-d5	35		15 - 120	08/14/25 15:50	08/15/25 13:51	1
Terphenyl-d14	87		54 - 127	08/14/25 15:50	08/15/25 13:51	1

**Lab Sample ID: LCS 280-709122/2-A**  
**Matrix: Water**  
**Analysis Batch: 709301**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 709122**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthylene	80.0	42.9		ug/L		54	33 - 145
Anthracene	80.0	67.4		ug/L		84	27 - 133
Benzo[a]anthracene	80.0	69.7		ug/L		87	33 - 143
Benzo[b]fluoranthene	80.0	71.6		ug/L		90	24 - 159
Benzo[k]fluoranthene	80.0	68.0		ug/L		85	11 - 162
Benzo[a]pyrene	80.0	66.9		ug/L		84	17 - 163
Chrysene	80.0	67.3		ug/L		84	17 - 168
Dibenz(a,h)anthracene	80.0	71.4		ug/L		89	1 - 227
Fluoranthene	80.0	73.1		ug/L		91	26 - 137
Fluorene	80.0	56.4		ug/L		71	59 - 121
Indeno[1,2,3-cd]pyrene	80.0	75.4		ug/L		94	1 - 171
Naphthalene	80.0	41.6		ug/L		52	21 - 133
Phenanthrene	80.0	65.9		ug/L		82	54 - 120
Pyrene	80.0	64.4		ug/L		80	52 - 120
Benzo[g,h,i]perylene	80.0	69.7		ug/L		87	1 - 219

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 280-709122/2-A**  
**Matrix: Water**  
**Analysis Batch: 709301**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 709122**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	66		22 - 120
2-Fluorophenol	50		23 - 120
2,4,6-Tribromophenol	95		41 - 134
Nitrobenzene-d5	71		36 - 120
Phenol-d5	36		15 - 120
Terphenyl-d14	91		54 - 127

**Lab Sample ID: 280-211754-11 MS**  
**Matrix: Water**  
**Analysis Batch: 709301**

**Client Sample ID: AWL-25-02368-011**  
**Prep Type: Total/NA**  
**Prep Batch: 709122**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
Acenaphthene	ND		80.0	44.3		ug/L		55	47 - 145
Acenaphthylene	ND		80.0	41.3		ug/L		52	33 - 145
Anthracene	ND		80.0	72.7		ug/L		91	27 - 133
Benzo[a]anthracene	ND		80.0	76.8		ug/L		96	33 - 143
Benzo[b]fluoranthene	ND		80.0	78.6		ug/L		98	24 - 159
Benzo[k]fluoranthene	ND		80.0	73.2		ug/L		92	11 - 162
Benzo[a]pyrene	ND		80.0	73.4		ug/L		92	17 - 163
Chrysene	ND		80.0	75.4		ug/L		94	17 - 168
Dibenz(a,h)anthracene	ND		80.0	81.5		ug/L		102	1 - 227
Fluoranthene	ND		80.0	81.7		ug/L		102	26 - 137
Fluorene	ND		80.0	55.5		ug/L		69	59 - 121
Indeno[1,2,3-cd]pyrene	ND		80.0	88.7		ug/L		111	1 - 171
Naphthalene	ND		80.0	38.1		ug/L		48	21 - 133
Phenanthrene	ND		80.0	72.0		ug/L		90	54 - 120
Pyrene	ND		80.0	69.3		ug/L		87	52 - 120
Benzo[g,h,i]perylene	ND		80.0	79.1		ug/L		99	1 - 219

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	56		22 - 120
2-Fluorophenol	40		23 - 120
2,4,6-Tribromophenol	97		41 - 134
Nitrobenzene-d5	56		36 - 120
Phenol-d5	31		15 - 120
Terphenyl-d14	89		54 - 127

**Lab Sample ID: 280-211754-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 709301**

**Client Sample ID: AWL-25-02368-011**  
**Prep Type: Total/NA**  
**Prep Batch: 709122**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits	RPD	Limit
				Result	Qualifier						
Acenaphthene	ND		80.0	43.4		ug/L		54	47 - 145	2	48
Acenaphthylene	ND		80.0	40.2		ug/L		50	33 - 145	3	74
Anthracene	ND		80.0	66.6		ug/L		83	27 - 133	9	66
Benzo[a]anthracene	ND		80.0	68.3		ug/L		85	33 - 143	12	53
Benzo[b]fluoranthene	ND		80.0	70.3		ug/L		88	24 - 159	11	71
Benzo[k]fluoranthene	ND		80.0	65.3		ug/L		82	11 - 162	11	63

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 280-211754-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 709301**

**Client Sample ID: AWL-25-02368-011**  
**Prep Type: Total/NA**  
**Prep Batch: 709122**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene	ND		80.0	64.2		ug/L		80	17 - 163	13	72
Chrysene	ND		80.0	66.7		ug/L		83	17 - 168	12	87
Dibenz(a,h)anthracene	ND		80.0	71.6		ug/L		89	1 - 227	13	126
Fluoranthene	ND		80.0	72.0		ug/L		90	26 - 137	13	66
Fluorene	ND		80.0	55.0		ug/L		69	59 - 121	1	38
Indeno[1,2,3-cd]pyrene	ND		80.0	77.5		ug/L		97	1 - 171	14	99
Naphthalene	ND		80.0	32.5		ug/L		41	21 - 133	16	65
Phenanthrene	ND		80.0	66.2		ug/L		83	54 - 120	8	39
Pyrene	ND		80.0	64.4		ug/L		80	52 - 120	7	49
Benzo[g,h,i]perylene	ND		80.0	69.7		ug/L		87	1 - 219	13	97

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
2-Fluorobiphenyl	60		22 - 120
2-Fluorophenol	36		23 - 120
2,4,6-Tribromophenol	90		41 - 134
Nitrobenzene-d5	56		36 - 120
Phenol-d5	29		15 - 120
Terphenyl-d14	87		54 - 127

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID: MB 280-708791/1-A**  
**Matrix: Water**  
**Analysis Batch: 709271**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 708791**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	60	ug/L		08/12/25 15:24	08/14/25 19:33	1
Magnesium	ND		200	50	ug/L		08/12/25 15:24	08/14/25 19:33	1

**Lab Sample ID: LCS 280-708791/2-A**  
**Matrix: Water**  
**Analysis Batch: 709271**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 708791**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	52300		ug/L		105	85 - 115
Magnesium	50000	51800		ug/L		104	85 - 115

**Lab Sample ID: 280-211754-11 MS**  
**Matrix: Water**  
**Analysis Batch: 709271**

**Client Sample ID: AWL-25-02368-011**  
**Prep Type: Total/NA**  
**Prep Batch: 708791**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	20000		50000	71400		ug/L		103	75 - 125
Magnesium	5400		50000	56800		ug/L		103	75 - 125

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 280-211754-11 MSD  
Matrix: Water  
Analysis Batch: 709271

Client Sample ID: AWL-25-02368-011  
Prep Type: Total/NA  
Prep Batch: 708791

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	20000		50000	72700		ug/L		106	75 - 125	2	20
Magnesium	5400		50000	57900		ug/L		105	75 - 125	2	20

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 280-708797/1-A  
Matrix: Water  
Analysis Batch: 709457

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 708797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	1.0	ug/L		08/12/25 15:42	08/15/25 22:35	1

Lab Sample ID: LCS 280-708797/2-A  
Matrix: Water  
Analysis Batch: 709457

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 708797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	38.5		ug/L		96	90 - 115

Lab Sample ID: 280-211754-11 MS  
Matrix: Water  
Analysis Batch: 709457

Client Sample ID: AWL-25-02368-011  
Prep Type: Dissolved  
Prep Batch: 708797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	6.7		40.0	45.0		ug/L		96	90 - 115

Lab Sample ID: 280-211754-11 MSD  
Matrix: Water  
Analysis Batch: 709457

Client Sample ID: AWL-25-02368-011  
Prep Type: Dissolved  
Prep Batch: 708797

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	6.7		40.0	43.7		ug/L		92	90 - 115	3	20

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## GC/MS VOA

### Analysis Batch: 708832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-3	AWL-25-02368-003	Total/NA	Water	624.1	
280-211754-5	AWL-25-02368-005	Total/NA	Water	624.1	
280-211754-8	AWL-25-02368-008	Total/NA	Water	624.1	
280-211754-11	AWL-25-02368-011	Total/NA	Water	624.1	
280-211754-12	AWL-25-02368-012	Total/NA	Water	624.1	
280-211754-13	AWL-25-02368-013	Total/NA	Water	624.1	
MB 280-708832/9	Method Blank	Total/NA	Water	624.1	
LCS 280-708832/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-708832/5	Lab Control Sample Dup	Total/NA	Water	624.1	
280-211754-11 MS	AWL-25-02368-011	Total/NA	Water	624.1	
280-211754-11 MSD	AWL-25-02368-011	Total/NA	Water	624.1	

## GC/MS Semi VOA

### Prep Batch: 709122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-3	AWL-25-02368-003	Total/NA	Water	625	
280-211754-5	AWL-25-02368-005	Total/NA	Water	625	
280-211754-8	AWL-25-02368-008	Total/NA	Water	625	
280-211754-11	AWL-25-02368-011	Total/NA	Water	625	
280-211754-12	AWL-25-02368-012	Total/NA	Water	625	
MB 280-709122/1-A	Method Blank	Total/NA	Water	625	
LCS 280-709122/2-A	Lab Control Sample	Total/NA	Water	625	
280-211754-11 MS	AWL-25-02368-011	Total/NA	Water	625	
280-211754-11 MSD	AWL-25-02368-011	Total/NA	Water	625	

### Analysis Batch: 709301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-3	AWL-25-02368-003	Total/NA	Water	625.1	709122
280-211754-5	AWL-25-02368-005	Total/NA	Water	625.1	709122
280-211754-8	AWL-25-02368-008	Total/NA	Water	625.1	709122
280-211754-11	AWL-25-02368-011	Total/NA	Water	625.1	709122
280-211754-12	AWL-25-02368-012	Total/NA	Water	625.1	709122
MB 280-709122/1-A	Method Blank	Total/NA	Water	625.1	709122
LCS 280-709122/2-A	Lab Control Sample	Total/NA	Water	625.1	709122
280-211754-11 MS	AWL-25-02368-011	Total/NA	Water	625.1	709122
280-211754-11 MSD	AWL-25-02368-011	Total/NA	Water	625.1	709122

## Metals

### Prep Batch: 708791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-1	AWL-25-02368-001	Total/NA	Water	200.7	
280-211754-2	AWL-25-02368-002	Total/NA	Water	200.7	
280-211754-3	AWL-25-02368-003	Total/NA	Water	200.7	
280-211754-4	AWL-25-02368-004	Total/NA	Water	200.7	
280-211754-5	AWL-25-02368-005	Total/NA	Water	200.7	
280-211754-6	AWL-25-02368-006	Total/NA	Water	200.7	
280-211754-7	AWL-25-02368-007	Total/NA	Water	200.7	
280-211754-8	AWL-25-02368-008	Total/NA	Water	200.7	
280-211754-9	AWL-25-02368-009	Total/NA	Water	200.7	
280-211754-10	AWL-25-02368-010	Total/NA	Water	200.7	

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Metals (Continued)

### Prep Batch: 708791 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-11	AWL-25-02368-011	Total/NA	Water	200.7	
280-211754-12	AWL-25-02368-012	Total/NA	Water	200.7	
MB 280-708791/1-A	Method Blank	Total/NA	Water	200.7	
LCS 280-708791/2-A	Lab Control Sample	Total/NA	Water	200.7	
280-211754-11 MS	AWL-25-02368-011	Total/NA	Water	200.7	
280-211754-11 MSD	AWL-25-02368-011	Total/NA	Water	200.7	

### Prep Batch: 708797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-1	AWL-25-02368-001	Dissolved	Water	200.8	
280-211754-2	AWL-25-02368-002	Dissolved	Water	200.8	
280-211754-3	AWL-25-02368-003	Dissolved	Water	200.8	
280-211754-4	AWL-25-02368-004	Dissolved	Water	200.8	
280-211754-5	AWL-25-02368-005	Dissolved	Water	200.8	
280-211754-6	AWL-25-02368-006	Dissolved	Water	200.8	
280-211754-7	AWL-25-02368-007	Dissolved	Water	200.8	
280-211754-8	AWL-25-02368-008	Dissolved	Water	200.8	
280-211754-9	AWL-25-02368-009	Dissolved	Water	200.8	
280-211754-10	AWL-25-02368-010	Dissolved	Water	200.8	
280-211754-11	AWL-25-02368-011	Dissolved	Water	200.8	
280-211754-12	AWL-25-02368-012	Dissolved	Water	200.8	
MB 280-708797/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-708797/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-211754-11 MS	AWL-25-02368-011	Dissolved	Water	200.8	
280-211754-11 MSD	AWL-25-02368-011	Dissolved	Water	200.8	

### Analysis Batch: 709271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-1	AWL-25-02368-001	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-2	AWL-25-02368-002	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-3	AWL-25-02368-003	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-4	AWL-25-02368-004	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-5	AWL-25-02368-005	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-6	AWL-25-02368-006	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-7	AWL-25-02368-007	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-8	AWL-25-02368-008	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-9	AWL-25-02368-009	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-10	AWL-25-02368-010	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-11	AWL-25-02368-011	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-12	AWL-25-02368-012	Total/NA	Water	200.7 Rev 4.4	708791
MB 280-708791/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	708791
LCS 280-708791/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-11 MS	AWL-25-02368-011	Total/NA	Water	200.7 Rev 4.4	708791
280-211754-11 MSD	AWL-25-02368-011	Total/NA	Water	200.7 Rev 4.4	708791

### Analysis Batch: 709457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-1	AWL-25-02368-001	Dissolved	Water	200.8	708797
280-211754-2	AWL-25-02368-002	Dissolved	Water	200.8	708797
280-211754-3	AWL-25-02368-003	Dissolved	Water	200.8	708797
280-211754-4	AWL-25-02368-004	Dissolved	Water	200.8	708797

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Metals (Continued)

### Analysis Batch: 709457 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-211754-5	AWL-25-02368-005	Dissolved	Water	200.8	708797
280-211754-6	AWL-25-02368-006	Dissolved	Water	200.8	708797
280-211754-7	AWL-25-02368-007	Dissolved	Water	200.8	708797
280-211754-8	AWL-25-02368-008	Dissolved	Water	200.8	708797
280-211754-9	AWL-25-02368-009	Dissolved	Water	200.8	708797
280-211754-10	AWL-25-02368-010	Dissolved	Water	200.8	708797
280-211754-11	AWL-25-02368-011	Dissolved	Water	200.8	708797
280-211754-12	AWL-25-02368-012	Dissolved	Water	200.8	708797
MB 280-708797/1-A	Method Blank	Total Recoverable	Water	200.8	708797
LCS 280-708797/2-A	Lab Control Sample	Total Recoverable	Water	200.8	708797
280-211754-11 MS	AWL-25-02368-011	Dissolved	Water	200.8	708797
280-211754-11 MSD	AWL-25-02368-011	Dissolved	Water	200.8	708797

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

**Client Sample ID: AWL-25-02368-001**

**Lab Sample ID: 280-211754-1**

Date Collected: 08/07/25 09:55

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:19	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 22:40	LMT	EET DEN

**Client Sample ID: AWL-25-02368-002**

**Lab Sample ID: 280-211754-2**

Date Collected: 08/07/25 09:45

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:23	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 22:43	LMT	EET DEN

**Client Sample ID: AWL-25-02368-003**

**Lab Sample ID: 280-211754-3**

Date Collected: 08/07/25 08:55

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	708832	08/13/25 11:10	MD	EET DEN
Total/NA	Prep	625			242.5 mL	1 mL	709122	08/14/25 15:50	JES	EET DEN
Total/NA	Analysis	625.1		1			709301	08/15/25 16:31	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:26	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 22:46	LMT	EET DEN

**Client Sample ID: AWL-25-02368-004**

**Lab Sample ID: 280-211754-4**

Date Collected: 08/07/25 08:30

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:30	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 22:49	LMT	EET DEN

**Client Sample ID: AWL-25-02368-005**

**Lab Sample ID: 280-211754-5**

Date Collected: 08/07/25 07:05

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	708832	08/13/25 11:32	MD	EET DEN
Total/NA	Prep	625			264.4 mL	1 mL	709122	08/14/25 15:50	JES	EET DEN
Total/NA	Analysis	625.1		1			709301	08/15/25 16:54	PW	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

**Client Sample ID: AWL-25-02368-005**

**Lab Sample ID: 280-211754-5**

**Date Collected: 08/07/25 07:05**

**Matrix: Water**

**Date Received: 08/12/25 09:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:45	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 22:51	LMT	EET DEN

**Client Sample ID: AWL-25-02368-006**

**Lab Sample ID: 280-211754-6**

**Date Collected: 08/07/25 07:20**

**Matrix: Water**

**Date Received: 08/12/25 09:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:48	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 22:54	LMT	EET DEN

**Client Sample ID: AWL-25-02368-007**

**Lab Sample ID: 280-211754-7**

**Date Collected: 08/07/25 07:25**

**Matrix: Water**

**Date Received: 08/12/25 09:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:52	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 22:57	LMT	EET DEN

**Client Sample ID: AWL-25-02368-008**

**Lab Sample ID: 280-211754-8**

**Date Collected: 08/07/25 08:00**

**Matrix: Water**

**Date Received: 08/12/25 09:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	708832	08/13/25 11:53	MD	EET DEN
Total/NA	Prep	625			262.7 mL	1 mL	709122	08/14/25 15:50	JES	EET DEN
Total/NA	Analysis	625.1		1			709301	08/15/25 17:17	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:55	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 22:59	LMT	EET DEN

**Client Sample ID: AWL-25-02368-009**

**Lab Sample ID: 280-211754-9**

**Date Collected: 08/07/25 08:10**

**Matrix: Water**

**Date Received: 08/12/25 09:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:26	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 20:59	CAF	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

**Client Sample ID: AWL-25-02368-009**

**Lab Sample ID: 280-211754-9**

Date Collected: 08/07/25 08:10

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 23:07	LMT	EET DEN

**Client Sample ID: AWL-25-02368-010**

**Lab Sample ID: 280-211754-10**

Date Collected: 08/07/25 10:15

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:26	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 21:03	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 23:10	LMT	EET DEN

**Client Sample ID: AWL-25-02368-011**

**Lab Sample ID: 280-211754-11**

Date Collected: 08/07/25 09:20

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	708832	08/13/25 10:49	MD	EET DEN
Total/NA	Prep	625			263.5 mL	1 mL	709122	08/14/25 15:50	JES	EET DEN
Total/NA	Analysis	625.1		1			709301	08/15/25 17:40	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:26	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 21:06	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 23:13	LMT	EET DEN

**Client Sample ID: AWL-25-02368-012**

**Lab Sample ID: 280-211754-12**

Date Collected: 08/07/25 09:30

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	708832	08/13/25 12:15	MD	EET DEN
Total/NA	Prep	625			224.7 mL	1 mL	709122	08/14/25 15:50	JES	EET DEN
Total/NA	Analysis	625.1		1			709301	08/15/25 18:48	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	708791	08/12/25 15:27	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			709271	08/14/25 21:18	CAF	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	708797	08/12/25 15:42	SMK	EET DEN
Dissolved	Analysis	200.8		1			709457	08/15/25 23:26	LMT	EET DEN

**Client Sample ID: AWL-25-02368-013**

**Lab Sample ID: 280-211754-13**

Date Collected: 08/07/25 07:05

Matrix: Water

Date Received: 08/12/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	708832	08/13/25 09:22	MD	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Accreditation/Certification Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02368

Job ID: 280-211754-1

## Laboratory: Eurofins Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	18-001	11-30-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Calcium
200.7 Rev 4.4	200.7	Water	Magnesium
624.1		Water	Total BTEX

Oregon	NELAP	4025	01-08-26
--------	-------	------	----------



FROM: Alaska Water Laboratories LLC. 281 N. Main St, STE 101 Wasilla AK 99654 Mary @AKWaterLabs.com		Sub-Contracted Lab:		EET-Denver 4955 Yarrow St Arvada, CO 80002	
Client Project Name: AWL-25-02368		Certification Required:		Alaska Wastewater	
Requested Due Date (if not standard TAT): Standard		Notes: Level 2 report		Report to MDL Provide EDD	
Samples					
AWL ID	Collection Date/ Time	Analysis	Comments	Matrix	
AWL-25-02368-001-3	08/07/2025 09:55 AM	200.8	200.8: Cu Sample filtered and preserved at AWL	WW	
AWL-25-02368-001-4	08/07/2025 09:55 AM	200.7	200.7 Ca, Mg ; pH<2	WW	
AWL-25-02368-002-3	08/07/202 09:45 AM	200.8	Dissolved 200.8: Cu Sample filtered and preserved upon receipt at AWL.	WW	
AWL-25-02368-002-4	08/07/202 09:45 AM	200.7	pH<2 200.7: Ca, Mg	WW	
AWL-25-02368-003-3	08/07/2025 08:55 AM	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL.	WW	
AWL-25-02368-003-4	08/07/2025 08:55 AM	200.7	pH<2 200.7: Ca, Mg	WW	
AWL-25-02368-003-5	08/07/2025 08:55 AM	625 PAH	EPA 625.1 PAH	WW	
AWL-25-02368-003-6	08/07/2025 08:55 AM	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW	
AWL-25-02368-004-3	08/07/2025 08:30 AM	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL.	WW	
AWL-25-02368-004-4	08/07/2025 08:30 AM	200.7	pH<2 200.7: Ca, Mg	WW	
AWL-25-02368-005-3	08/07/2025 07:05 AM	200.8	Dissolved 200.8: Cu Filtered and Preserved at AWL upon receipt.	WW	
AWL-25-02368-005-4	08/07/2025 07:05 AM	200.7	pH<2 200.7: Ca, Mg	WW	

*[Handwritten signature]*

8/11/25 10:00

JP  
T:3.4

8/12/25 9:30

CF:0.2 IR PABJ



280-211754 Chain of Custody



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

AWL-25-02368-005-5	08/07/2025 07:05 AM	625 PAH	EPA 625.1 PAH	WW
AWL-25-02368-005-6	08/07/2025 07:05 AM	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02368-006-3	08/07/2025 07:20 AM	200.8	Dissolved 200.8: Cu Filtered and Preserved at AWL upon receipt.	WW
AWL-25-02368-006-4	08/07/2025 07:20 AM	200.7	pH<2 200.7: Ca, Mg	WW
AWL-25-02368-007-3	08/07/2025 07:25 AM	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02368-007-4	08/07/2025 07:25 AM	200.7	pH<2 200.7: Ca, Mg	WW
AWL-25-02368-008-3	08/07/2025 08:00 AM	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL.	WW
AWL-25-02368-008-4	08/07/2025 08:00 AM	200.7	pH<2 200.7: Ca, Mg	WW
AWL-25-02368-008-5	08/07/2025 08:00 AM	625 PAH	EPA 625.1 PAH	WW
AWL-25-02368-008-6	08/07/2025 08:00 AM	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02368-009-3	08/07/2025 08:10 AM	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02368-009-4	08/07/2025 08:10 AM	200.7	pH<2 200.7: Ca, Mg	WW
AWL-25-02368-010-3	08/07/2025 10:15 AM	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL	WW
AWL-25-02368-010-4	08/07/2025 10:15 AM	200.7	pH<2 200.7: Ca, Mg	WW
AWL-25-02368-011-3	08/07/2025 09:20 AM	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL. Primary, MS/MSD - xvol sent	WW
AWL-25-02368-011-4	08/07/2025 09:20 AM	200.7	pH<2 200.7: Ca, Mg Primary, MS/MSD - xvol sent	WW

*Matt*

*8/11/25 10:00*

*SP*

*8/12/25 9:30*

AWL-25-02368-011-5	08/07/2025 09:20 AM	625 PAH	EPA 625.1 PAH Primary, MS/MSD - xvolsent	WW
AWL-25-02368-011-6	08/07/2025 09:20 AM	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary, MS/MSD - xvolsent	WW
AWL-25-02368-012-3	08/07/2025 09:30 AM	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02368-012-4	08/07/2025 09:30 AM	200.7	pH<2 200.7: Ca, Mg	WW
AWL-25-02368-012-5	08/07/2025 09:30 AM	625 PAH	EPA 625.1 PAH	WW
AWL-25-02368-012-6	08/07/2025 09:30 AM	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02368-013-1	08/07/2025 07:05 AM	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - Trip Blank	AQ
<b>Relinquished By:</b>	<b>Date &amp; Time:</b>	<b>Received By:</b>	<b>Date &amp; Time:</b>	<b>Temp:</b>
<i>Mati</i>	8/14/25 10:00	<i>SPB</i>	8/12/25 9:30	

CoC Seal? Y / N

pH:

Ice: Frozen  
Melted / None

<b>Relinquished By:</b>	<b>Date &amp; Time:</b>	<b>Received By:</b>	<b>Date &amp; Time:</b>	<b>Temp:</b>

CoC Seal? Y / N

pH:

Ice: Frozen  
Melted / None

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



280-211754 Waybill

ORIGIN: WAAA (907) 750-6130  
 MARY CURRY  
 ALASKA WATER LABORATORIES  
 281 N MAIN ST.  
 SUITE 101  
 WASILLA, AK 99654  
 UNITED STATES US

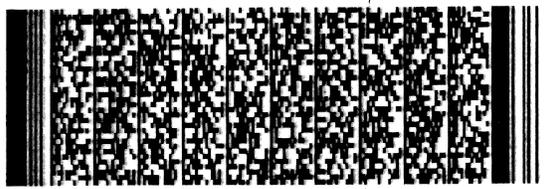
SHIP DATE: 11AUG25  
 ACTWGT: 51.25 LB  
 CAD: 253578886/NET4636  
 DIMS: 25x14x14 IN  
 BILL SENDER

TO TEST AMERICA DENVER  
 TEST AMERICA DENVER  
 4855 YARROW ST

ARVADA CO 80002

(303) 735-0100 REP.  
 INZ  
 FC DEPT.

58G-J/AB55/59F2

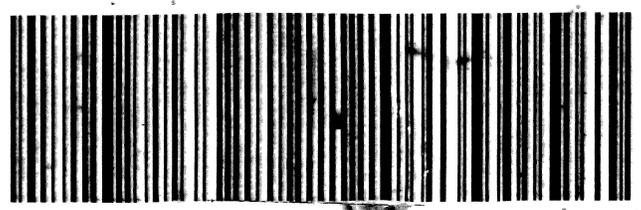


TUE - 12 AUG 5:00P  
 STANDARD OVERNIGHT

TRK# 8834 7898 2593  
 0201

**NXLAAA**

80002  
 CO-US DEN



# Login Sample Receipt Checklist

Client: Alaska Water Laboratories

Job Number: 280-211754-1

**Login Number: 211754**

**List Source: Eurofins Denver**

**List Number: 1**

**Creator: Bieniulis, Dylan T**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	N/A	
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	





**Appendix C2**  
**Laboratory Data Package**  
**Storm Event #2**



*This page intentionally left blank.*

**Alaska Laboratory AK01000**

**Client** HDR Inc

**Contact** Cindy Helmericks

**Project Name** MOA Stormwater Monitoring - Sampling 2 2025

**AWL #** AWL-25-02596

**PWS #** Non PWS

Please direct any questions regarding the final report to your Project Manager [Alex@AKWaterLabs.com](mailto:Alex@AKWaterLabs.com) or [Mary@AKWaterLabs.com](mailto:Mary@AKWaterLabs.com), or call the lab for general questions.

Alaska Water Laboratories is an approved ADEC certified lab for wet chemistry and Microbiology; the results presented in this report meet the requirement of the laboratory's certifications and internal QC processes. Any exceptions will be noted in the case narratives attached. Subcontract data will be entered into AWL final reports. Full subcontract reports are available upon request.

The attached should contain analytical results for the analyses submitted on the client chain of custody. The information includes no opinions of the analysts or labs, data is represented after meeting certified testing requirements, and quality control measures.

Reproduction of the report requires the written approval of the laboratory.



Alexandria Smoot

Project Manager

09/16/2025

---

AWL Laboratory Management

Date

**Alaska Laboratory #AK01000**

Client Project Name	MOA Stormwater Monitoring - Sampling 2 2025	AWL #	AWL-25-02596
Receipt Date and Time	08/28/2025 13:47	Due Date	09/19/2025
Cooler Temperature (C)	Dark Blue Cooler #1 11.5C 136A; Dark Blue Cooler #2 7.4C 136A; Teal Blue Cooler #3 4.3C	Sampler Initials	MZ CK
Sample receipt comments	Samples received by MCC on 08/28/2025 at Dark Blue Cooler #1 11.5C 136A; Dark Blue Cooler #2 7.4C 136A; Teal Blue Cooler #3 (all VOA Vial's) 4.3C 136A. No Bubbles in VOA Vial's. All Hardness pH< 2, Cu filtered and Preserved at lab		
Log In	VJG 08/28/2025 (Cover Page Only); AKS 08/29/2025	DQO	VJG 08/29/2025

**Samples Received**

Sample Location	AWL ID	Collection Date/Time	Analysis Date/Time	Analysis	Notes
SWM 03-02	AWL-25-02596-001-1	08/28/2025 11:33	9/2/25 15:02	SM2540D	
SWM 03-02	AWL-25-02596-001-1	08/28/2025 11:33	9/2/25 15:02	SM5210B BOD	
SWM 03-02	AWL-25-02596-001-2	08/28/2025 11:33	08/28/25 15:08	SM9222D Fecal Coliform by MF	00247
SWM 03-02	AWL-25-02596-001-3	08/28/2025 11:33	9/10/25 8:28	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 03-02	AWL-25-02596-001-4	08/28/2025 11:33	9/4/25 18:00	200.7	200.7 Ca, Mg ; pH<2
SWM 03-02	AWL-25-02596-001-4	08/28/2025 11:33	9/15/25 08:40	SM2340B	200.7 Ca, Mg ; pH<2
SWM 04-02	AWL-25-02596-002-1	08/28/2025 11:43	9/2/25 15:02	SM5210B BOD	
SWM 04-02	AWL-25-02596-002-1	08/28/2025 11:43	9/2/25 15:02	SM2540D	
SWM 04-02	AWL-25-02596-002-2	08/28/2025 11:43	08/28/25 15:08	SM9222D Fecal Coliform by MF	00249

SWM 04-02	AWL-25-02596-002-3	08/28/2025 11:43	9/10/25 8:31	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 04-02	AWL-25-02596-002-4	08/28/2025 11:43	9/4/25 18:04	200.7	200.7 Ca, Mg ; pH<2
SWM 04-02	AWL-25-02596-002-4	08/28/2025 11:43	9/15/25 08:41	SM2340B	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-1	08/28/2025 10:25	9/2/25 15:02	SM2540D	
SWM 05-02	AWL-25-02596-003-1	08/28/2025 10:25	9/2/25 15:02	SM5210B BOD	
SWM 05-02	AWL-25-02596-003-2	08/28/2025 10:25	08/28/25 15:08	SM9222D Fecal Coliform by MF	00248
SWM 05-02	AWL-25-02596-003-3	08/28/2025 10:25	9/10/25 8:35	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 05-02	AWL-25-02596-003-4	08/28/2025 10:25	9/4/25 18:08	200.7	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-4	08/28/2025 10:25	9/15/25 08:43	SM2340B	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-5	08/28/2025 10:25	9/5/25 18:19	625 PAH	EPA 625.1 PAH
SWM 05-02	AWL-25-02596-003-6	08/28/2025 10:25	9/5/25 12:16	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total

SWM 05-02	AWL-25-02596-003-6	08/28/2025 10:25	9/16/2025 09:47	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 06-02	AWL-25-02596-004-1	08/28/2025 09:48	9/2/25 15:02	SM2540D	
SWM 06-02	AWL-25-02596-004-1	08/28/2025 09:48	9/2/25 15:02	SM5210B BOD	
SWM 06-02	AWL-25-02596-004-2	08/28/2025 09:48	08/28/25 15:08	SM9222D Fecal Coliform by MF	00384
SWM 06-02	AWL-25-02596-004-3	08/28/2025 09:48	9/10/25 8:39	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 06-02	AWL-25-02596-004-4	08/28/2025 09:48	9/4/25 18:13	200.7	200.7 Ca, Mg ; pH<2
SWM 06-02	AWL-25-02596-004-4	08/28/2025 09:48	9/15/25 08:45	SM2340B	200.7 Ca, Mg ; pH<2
SWM 07-02	AWL-25-02596-005-1	08/28/2025 08:03	9/2/25 15:02	SM5210B BOD	
SWM 07-02	AWL-25-02596-005-1	08/28/2025 08:03	9/2/25 15:02	SM2540D	
SWM 07-02	AWL-25-02596-005-2	08/28/2025 08:03	08/28/25 15:08	SM9222D Fecal Coliform by MF	00383
SWM 07-02	AWL-25-02596-005-3	08/28/2025 08:03	9/10/25 8:42	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 07-02	AWL-25-02596-005-4	08/28/2025 08:03	9/4/25 18:17	200.7	200.7 Ca, Mg ; pH<2

SWM 07-02	AWL-25-02596-005-4	08/28/2025 08:03	9/15/25 08:46	SM2340B	200.7 Ca, Mg ; pH<2
SWM 07-02	AWL-25-02596-005-5	08/28/2025 08:03	9/5/25 18:41	625 PAH	EPA 625.1 PAH
SWM 07-02	AWL-25-02596-005-6	08/28/2025 08:03	9/5/25 12:36	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 07-02	AWL-25-02596-005-6	08/28/2025 08:03	9/16/2025 09:48	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 08-02	AWL-25-02596-006-1	08/28/2025 08:18	9/2/25 15:02	SM5210B BOD	
SWM 08-02	AWL-25-02596-006-1	08/28/2025 08:18	9/2/25 15:02	SM2540D	
SWM 08-02	AWL-25-02596-006-2	08/28/2025 08:18	08/28/25 15:08	SM9222D Fecal Coliform by MF	00381
SWM 08-02	AWL-25-02596-006-3	08/28/2025 08:18	9/10/25 8:46	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 08-02	AWL-25-02596-006-4	08/28/2025 08:18	9/4/25 18:21	200.7	200.7 Ca, Mg ; pH<2

SWM 08-02	AWL-25-02596-006-4	08/28/2025 08:18	9/15/25 08:48	SM2340B	200.7 Ca, Mg ; pH<2
SWM 08-02 Dup	AWL-25-02596-007-1	08/28/2025 08:28	9/2/25 15:02	SM2540D	
SWM 08-02 Dup	AWL-25-02596-007-1	08/28/2025 08:28	9/2/25 15:02	SM5210B BOD	
SWM 08-02 Dup	AWL-25-02596-007-2	08/28/2025 08:28	08/28/25 15:51	SM9222D Fecal Coliform by MF	00382
SWM 08-02 Dup	AWL-25-02596-007-3	08/28/2025 08:28	9/10/25 8:49	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 08-02 Dup	AWL-25-02596-007-4	08/28/2025 08:28	9/4/25 18:26	200.7	200.7 Ca, Mg ; pH<2
SWM 08-02 Dup	AWL-25-02596-007-4	08/28/2025 08:28	9/15/25 08:49	SM2340B	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-1	08/28/2025 09:20	9/2/25 15:02	SM5210B BOD	
SWM 09A-02	AWL-25-02596-008-1	08/28/2025 09:20	9/2/25 15:02	SM2540D	
SWM 09A-02	AWL-25-02596-008-2	08/28/2025 09:20	08/28/25 15:51	SM9222D Fecal Coliform by MF	00380
SWM 09A-02	AWL-25-02596-008-3	08/28/2025 09:20	9/10/25 8:53	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 09A-02	AWL-25-02596-008-4	08/28/2025 09:20	9/4/25 18:43	200.7	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-4	08/28/2025 09:20	9/15/25 08:50	SM2340B	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-5	08/28/2025 09:20	9/5/25 19:04	625 PAH	EPA 625.1 PAH

SWM 09A-02	AWL-25-02596-008-6	08/28/2025 09:20	9/5/25 12:57	624/624.1	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 09A-02	AWL-25-02596-008-6	08/28/2025 09:20	09/16/2025 09:51	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 10-02	AWL-25-02596-009-1	08/28/2025 08:58	9/2/25 15:02	SM2540D	
SWM 10-02	AWL-25-02596-009-1	08/28/2025 08:58	9/2/25 15:02	SM5210B BOD	
SWM 10-02	AWL-25-02596-009-2	08/28/2025 08:58	08/28/25 15:51	SM9222D Fecal Coliform by MF	00385
SWM 10-02	AWL-25-02596-009-3	08/28/2025 08:58	9/10/25 9:04	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 10-02	AWL-25-02596-009-4	08/28/2025 08:58	9/4/25 18:47	200.7	200.7 Ca, Mg ; pH<2
SWM 10-02	AWL-25-02596-009-4	08/28/2025 08:58	9/15/25 08:52	SM2340B	200.7 Ca, Mg ; pH<2
SWM 11-02	AWL-25-02596-010-1	08/28/2025 12:15	9/2/25 15:02	SM2540D	

SWM 11-02	AWL-25-02596-010-1	08/28/2025 12:15	9/2/25 15:02	SM5210B BOD	
SWM 11-02	AWL-25-02596-010-2	08/28/2025 12:15	08/28/25 15:51	SM9222D Fecal Coliform by MF	00386
SWM 11-02	AWL-25-02596-010-3	08/28/2025 12:15	9/10/25 9:07	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 11-02	AWL-25-02596-010-4	08/28/2025 12:15	9/4/25 18:52	200.7	200.7 Ca, Mg ; pH<2
SWM 11-02	AWL-25-02596-010-4	08/28/2025 12:15	9/15/25 08:53	SM2340B	200.7 Ca, Mg ; pH<2
SWM 12-02	AWL-25-02596-011-1	08/28/2025 10:50	9/2/25 15:02	SM5210B BOD	
SWM 12-02	AWL-25-02596-011-1	08/28/2025 10:50	9/2/25 15:02	SM2540D	
SWM 12-02	AWL-25-02596-011-2	08/28/2025 10:50	08/28/25 15:51	SM9222D Fecal Coliform by MF	00240; 243 x vol
SWM 12-02	AWL-25-02596-011-3	08/28/2025 10:50	9/11/25 9:23	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL. Primary, MS/ MSD - xvol sent
SWM 12-02	AWL-25-02596-011-4	08/28/2025 10:50	9/4/25 18:56	200.7	200.7 Ca, Mg ; pH<2 Primary/MS/ MSD - x vol sent
SWM 12-02	AWL-25-02596-011-4	08/28/2025 10:50	9/15/25 08:54	SM2340B	200.7 Ca, Mg ; pH<2 Primary/MS/ MSD - x vol sent
SWM 12-02	AWL-25-02596-011-5	08/28/2025 10:50	9/5/25 19:26	625 PAH	EPA 625.1 PAH Primary, MS/ MSD - xvol sent

SWM 12-02	AWL-25-02596-011-6	08/28/2025 10:50	9/8/25 8:18	624/624.1	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/ MSD - xvcl sent
SWM 12-02	AWL-25-02596-011-6	08/28/2025 10:50	09/16/2025 09:53	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/ MSD - xvcl sent
SWM 12-02 Dup	AWL-25-02596-012-1	08/28/2025 11:05	9/2/25 15:02	SM2540D	
SWM 12-02 Dup	AWL-25-02596-012-1	08/28/2025 11:05	9/2/25 15:02	SM5210B BOD	
SWM 12-02 Dup	AWL-25-02596-012-2	08/28/2025 11:05	08/28/25 15:51	SM9222D Fecal Coliform by MF	00246
SWM 12-02 Dup	AWL-25-02596-012-3	08/28/2025 11:05	9/10/25 11:58	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL.
SWM 12-02 Dup	AWL-25-02596-012-4	08/28/2025 11:05	9/4/25 19:18	200.7	200.7 Ca, Mg ; pH<2
SWM 12-02 Dup	AWL-25-02596-012-4	08/28/2025 11:05	9/15/25 08:55	SM2340B	200.7 Ca, Mg ; pH<2

SWM 12-02 Dup	AWL-25-02596-012-5	08/28/2025 11:05	9/5/25 20:32	625 PAH	EPA 625.1 PAH
SWM 12-02 Dup	AWL-25-02596-012-6	08/28/2025 11:05	9/8/25 8:39	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 12-02 Dup	AWL-25-02596-012-6	08/28/2025 11:05	09/16/2025 09:54	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM Trip Blank -02	AWL-25-02596-013-1	08/28/2025 08:03	9/8/25 6:31	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK

SWM Trip Blank -02	AWL-25-02596-013-1	08/28/2025 08:03	09/16/2025 09:55	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK
--------------------	--------------------	------------------	------------------	----------------------	---

**Analytical Methods**

Analyte	Analytical Method	Comments
BOD	SM5210B BOD	
Fecal Coliform	SM9222D Fecal Coliform by MF	
Ca, Mg	200.7	
Cu	200.8	
624 TAH	624 TAH	
625 PAH	625 PAH	
TAqH and TAH	Calculation	
Hardness	SM2340B Total Hardness	
TSS	SM2540D Total Suspended Solids	

Comments: Extra Volume goes to sublab for MS/MSD with SWM 12-01 sample for metals and 624/625 - AKS 8/29/25

Include lab QC in Report

Subcoc sent to EET Denver 8/29/25 - AKS

**Alaska Laboratory #AK01000**

**Definitions:**

DUP: Sample Duplicate  
LCS/LCSD: Laboratory Control Sample/Laboratory Control Sample Duplicate  
MRL: Method Reporting Limit  
MB: Method Blank  
MCL: Maximum Contaminant Limit  
MDL: Method Detection Limit  
MS/MSD: Matrix Spike/Matrix Spike Duplicate  
N/A: Not Applicable  
TNTC: Cell count is Too Numerous To Count  
<MDL: Result recovery is below the laboratory detectable limit, listed as the MDL.

**Data Qualifiers:**

B: The result of both the method blank and the target sample were recovered above the MDL.  
D: Sample was diluted prior to analysis.  
J: The reported result was recovered below the MRL (Method Reporting Limit), but above the MDL (Method Detection Limit), and should be considered an estimate.  
U: Result was recovered below the MDL, MRL, LOD, and LOQ.  
\*: The LCS/LCSD or DUP was recovered outside method specified control limits.  
H: Sample was received or analyzed outside of method specified holding time.  
E: Sample recovery is equal to or exceeded the MCL.  
Q: One or more Quality Control criteria was recovered outside of control limits.

**General Comments:**

1.0) Basis: "As Received" = Analyzed as received from client. "Dry" = dried prior to being analyzed. "Dry Weight Corrected" = analyzed as received, result corrected for percent moisture.

**Alaska Laboratory #AK01000**

**Analytical Results**

Client HDR Inc Project MOA Stormwater Monitoring - Sampling 2 2025

Contact Cindy Helmericks PWS # Non PWS

Project MOA Stormwater Monitoring - Sampling 2 2025

Sample Location: SWM 03-02 Collection Date/Time: 08/28/2025 11:33

AWL ID/ Fraction: AWL-25-02596-001-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	2.35	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	<MDL	mg/L	15.8	7.1		1.42	U	SM2540D	BKC	9/2/25 15:02

Comments: The result was less than the MDL. The result was 5.24 mg/L. Whole volume was used. BKC 9/4/25

Sample Location: SWM 03-02 Collection Date/Time: 08/28/2025 11:33

AWL ID/ Fraction: AWL-25-02596-001-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Anaylst Initials
Fecal Coliform	470.00	CFU/100mL	10.00			10.00	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-3 Matrix WW Sub Lab ID: 280-212807-1

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.4	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:28

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-4 Matrix WW Sub Lab ID: 280-212807-1

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	18000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:00
Magnesium	6600	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:00

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	72.12	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:40

Comments:

Sample Location: SWM 04-02

Collection Date/Time: 08/28/2025 11:43

AWL ID/ Fraction: AWL-25-02596-002-1

Matrix WW

Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	5.34	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-1

Matrix WW

Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	9.19	mg/L	16.47	7.4		1.48	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 04-02

Collection Date/Time: 08/28/2025 11:43

AWL ID/ Fraction: AWL-25-02596-002-2

Matrix WW

Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	DF	Flags	Method	Date/Time	Analyst Initials
Fecal Coliform	3800.00	CFU/100mL	100.00		100.00		SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-3

Matrix WW

Sub Lab ID: 280-212807-2

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.9	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:31

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-4

Matrix WW

Sub Lab ID: 280-212807-2

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	23000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:04
Magnesium	6100	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:04

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-4

Matrix WW

Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	82.55	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:41

Comments:

Sample Location: SWM 05-02

Collection Date/Time: 08/28/2025 10:25

AWL ID/ Fraction: AWL-25-02596-003-1

Matrix WW

Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	6.00	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	14.08	mg/L	20.36	9.15		1.83	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 05-02 Collection Date/Time: 08/28/2025 10:25

AWL ID/ Fraction: AWL-25-02596-003-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	5500.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-3 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.9	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:35

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-4 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	17000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:08
Magnesium	2600	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:08

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	53.16	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:43

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-5 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Acenaphthylene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Anthracene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[a]anthracene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[b]fluoranthene	ND	ug/L	4.3	2.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[k]fluoranthene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[a]pyrene	ND	ug/L	4.3	2.1		1		625.1	Eurofins Denver	9/5/25 18:19
Chrysene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Dibenz(a,h)anthracene	ND	ug/L	11	4.3		1		625.1	Eurofins Denver	9/5/25 18:19

Fluoranthene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Fluorene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Indeno[1,2,3-cd]pyrene	ND	ug/L	11	4.3	1	625.1	Eurofins Denver	9/5/25 18:19
Naphthalene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Phenanthrene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Pyrene	ND	ug/L	11	4.3	1	625.1	Eurofins Denver	9/5/25 18:19
Benzo[g,h,i]perylene	ND	ug/L	4.3	2.1	1	625.1	Eurofins Denver	9/5/25 18:19

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-6 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:16
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	9/16/2025 09:47
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	9/16/2025 09:47

Comments:

Sample Location: SWM 06-02 Collection Date/Time: 08/28/2025 09:48

AWL ID/ Fraction: AWL-25-02596-004-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	4.15	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	25.68	mg/L	16.91	7.6		1.52		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 06-02 Collection Date/Time: 08/28/2025 09:48

AWL ID/ Fraction: AWL-25-02596-004-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	781.82	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-3 Matrix WW Sub Lab ID: 280-212807-4

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.7	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:39

Comments:

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-4 Matrix WW Sub Lab ID: 280-212807-4

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	6900	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:13
Magnesium	1700	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:13

Comments:

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	24.23	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:45

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03

AWL ID/ Fraction: AWL-25-02596-005-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	5.89	mg/L	3	0.9			3	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-005-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	69.20	mg/L	44.51	20		4		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03

AWL ID/ Fraction: AWL-25-02596-005-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	1909.09	CFU/100mL	90.91			90.91	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-005-3 Matrix WW Sub Lab ID: 280-212807-5

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.3	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:42

Comments:

Sample Location:	SWM 07-02	SPID:	Collection Date/Time:	08/28/2025 08:03						
		FCID:								
AWL ID/ Fraction:	AWL-25-02596-005-4	Matrix	WW	Sub Lab ID: 280-212807-5						
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	3400	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:17
Magnesium	1300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:17

Comments:

Sample Location:	SWM 07-02	SPID:	Collection Date/Time:	08/28/2025 08:03						
		FCID:								
AWL ID/ Fraction:	AWL-25-02596-005-4	Matrix	WW	Batch ID: 091525-01-Hardness						
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	13.84	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:46

Comments:

Sample Location:	SWM 07-02	SPID:	Collection Date/Time:	08/28/2025 08:03						
		FCID:								
AWL ID/ Fraction:	AWL-25-02596-005-5	Matrix	WW	Sub Lab ID: 280-212807-5						
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Acenaphthylene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[a]anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[b]fluoranthene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[k]fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[a]pyrene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41
Chrysene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Dibenz(a,h)anthracene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Fluorene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Indeno[1,2,3-cd]pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Naphthalene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Phenanthrene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[g,h,i]perylene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41

Comments:

Sample Location:	SWM 07-02	SPID:	Collection Date/Time:	08/28/2025 08:03						
		FCID:								
AWL ID/ Fraction:	AWL-25-02596-005-6	Matrix	WW	Sub Lab ID: 280-212807-5						
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:36
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-005-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	9/16/2025 09:48
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	9/16/2025 09:48

Comments:

Sample Location: SWM 08-02 Collection Date/Time: 08/28/2025 08:18

AWL ID/ Fraction: AWL-25-02596-006-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	6.25	mg/L	3	0.9		3		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	33.00	mg/L	27.82	12.5		2.5		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 08-02 Collection Date/Time: 08/28/2025 08:18

AWL ID/ Fraction: AWL-25-02596-006-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	DF	Flags	Method	Date/Time	Analyst Initials
Fecal Coliform	11300.00	CFU/100mL	100.00		100.00		SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-3 Matrix WW Sub Lab ID: 280-212807-6

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.6	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:46

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-4 Matrix WW Sub Lab ID: 280-212807-6

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	4200	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:21
Magnesium	970	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:21

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	14.48	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:48

Comments:

Sample Location: SWM 08-02 Dup Collection Date/Time: 08/28/2025 08:28

AWL ID/ Fraction: AWL-25-02596-007-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	5.08	mg/L	3	0.9			3	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	27.00	mg/L	22.25	10			2	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 08-02 Dup Collection Date/Time: 08/28/2025 08:28

AWL ID/ Fraction: AWL-25-02596-007-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	>20000	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-3 Matrix WW Sub Lab ID: 280-212807-7

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.7	ug/L	2	1			1	J	200.8 Eurofins Denver	9/10/25 8:49

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-4 Matrix WW Sub Lab ID: 280-212807-7

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	4800	ug/L	200	60			1	200.7 Rev 4.4	Eurofins Denver	9/4/25 18:26
Magnesium	990	ug/L	200	50			1	200.7 Rev 4.4	Eurofins Denver	9/4/25 18:26

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	16.06	mg/L CaCO3	0.03	0.01			1	SM2340B Hardness	BKC	9/15/25 08:49

Comments:

Sample Location: SWM 09A-02 Collection Date/Time: 08/28/2025 09:20

AWL ID/ Fraction: AWL-25-02596-008-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	4.99	mg/L	4	1.2			4	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	26.00	mg/L	17.14	7.7		1.54		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 09A-02 Collection Date/Time: 08/28/2025 09:20

AWL ID/ Fraction: AWL-25-02596-008-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Anaylst Initials
Fecal Coliform	4800.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-3 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.4	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:53

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-4 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	21000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:43
Magnesium	3400	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:43

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	66.44	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:50

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-5 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Acenaphthylene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Anthracene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[a]anthracene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[b]fluoranthene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[k]fluoranthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[a]pyrene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	9/5/25 19:04
Chrysene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Dibenz(a,h)anthracene	ND	ug/L	9.4	3.8		1		625.1	Eurofins Denver	9/5/25 19:04
Fluoranthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Fluorene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.4	3.8		1		625.1	Eurofins Denver	9/5/25 19:04
Naphthalene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04

Phenanthrene	ND	ug/L	3.8	0.94	1	625.1	Eurofins Denver	9/5/25 19:04
Pyrene	ND	ug/L	9.4	3.8	1	625.1	Eurofins Denver	9/5/25 19:04
Benzo[g,h,i]perylene	ND	ug/L	3.8	1.9	1	625.1	Eurofins Denver	9/5/25 19:04

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20  
FCID:  
AWL ID/ Fraction: AWL-25-02596-008-6 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:57
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20  
FCID:  
AWL ID/ Fraction: AWL-25-02596-008-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:51
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:51

Comments:

Sample Location: SWM 10-02 SPID: Collection Date/Time: 08/28/2025 08:58  
AWL ID/ Fraction: AWL-25-02596-009-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	2.02	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 10-02 SPID: Collection Date/Time: 08/28/2025 08:58  
FCID:

AWL ID/ Fraction: AWL-25-02596-009-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	<MDL	mg/L	17.58	7.9		1.58	U	SM2540D	BKC	9/2/25 15:02

Comments: The result was less than the MDL. The result was 7.74 mg/L. Whole volume was used. BKC 9/4/25

Sample Location: SWM 10-02 SPID: Collection Date/Time: 08/28/2025 08:58  
AWL ID/ Fraction: AWL-25-02596-009-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	31000.00	CFU/100mL	1000.00			1000.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 10-02 SPID: Collection Date/Time: 08/28/2025 08:58  
FCID:

AWL ID/ Fraction: AWL-25-02596-009-3 Matrix WW Sub Lab ID: 280-212807-9

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.9	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 9:04

Comments:

Sample Location:	SWM 10-02	SPID:		Collection Date/Time:	08/28/2025 08:58
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-009-4	Matrix	WW	Sub Lab ID:	280-212807-9

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	22000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:47
Magnesium	5800	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:47

Comments:

Sample Location:	SWM 10-02	SPID:		Collection Date/Time:	08/28/2025 08:58
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-009-4	Matrix	WW	Batch ID:	091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	78.82	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:52

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-1	Matrix	WW	Batch ID:	082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	4.00	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-1	Matrix	WW	Batch ID:	090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	65.60	mg/L	22.25	10		2		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-2	Matrix	WW	Batch ID:	082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	1563.64	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-3	Matrix	WW	Sub Lab ID:	280-212807-10

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.5	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 9:07

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-4	Matrix	WW	Sub Lab ID:	280-212807-10

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
---------	--------	-------	-----	-----	-----	----	-------	--------	---------	--------------------



Total Hardness	85.87	mg/L CaCO3	0.03	0.01	1	SM2340B Hardness	BKC	9/15/25 08:54
----------------	-------	------------	------	------	---	------------------	-----	---------------

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-5 Matrix WW Sub Lab ID: 280-212807-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Acenaphthylene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[a]anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[b]fluoranthene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[k]fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[a]pyrene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26
Chrysene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Dibenz(a,h)anthracene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Fluorene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Indeno[1,2,3-cd]pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Naphthalene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Phenanthrene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[g,h,i]perylene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-6 Matrix WW Sub Lab ID: 280-212807-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 8:18
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:53
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:53

Comments:

Sample Location: SWM 12-02 Dup Collection Date/Time: 08/28/2025 11:05

AWL ID/ Fraction: AWL-25-02596-012-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	5.08	mg/L	2	0.6			2	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	20.75	mg/L	27.82	12.5		2.5	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 12-02 Dup Collection Date/Time: 08/28/2025 11:05

AWL ID/ Fraction: AWL-25-02596-012-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	15363.64	CFU/100mL	90.91			90.91	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-3 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.4	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 11:58

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-4 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	24000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 19:18
Magnesium	6300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 19:18

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-4 Matrix WW Batch ID: 091525-02-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	85.87	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:55

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-5 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Acenaphthylene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Anthracene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[a]anthracene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[b]fluoranthene	ND	ug/L	3.9	2		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[k]fluoranthene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[a]pyrene	ND	ug/L	3.9	2		1		625.1	Eurofins Denver	9/5/25 20:32

Chrysene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Dibenz(a,h)anthracene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Fluoranthene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Fluorene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Naphthalene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Phenanthrene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Pyrene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Benzo[g,h,i]perylene	ND	ug/L	3.9	2	1	625.1	Eurofins Denver	9/5/25 20:32

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-6 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 8:39
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:54
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:54

Comments:

Sample Location: SWM Trip Blank -02 SPID: Collection Date/Time: 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-013-1 Matrix AQ Sub Lab ID: 280-212807-13

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 6:31
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31

Comments:

Sample Location: SWM Trip Blank -02 SPID: Collection Date/Time 08/28/2025 08:03

AWL ID/ Fraction:		AWL-25-02596-013-1		FCID:				Batch ID:		091625-01-TAqH	
Matrix		AQ		MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)		<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:55
Total Aromatic Hydrocarbons (TAH)		NA	ug/L	1	1		1		Calculation	NA	NA

Comments:

**Alaska Laboratory #AK01000**

**Analysis QC**

**BOD SM 5210B**

**Batch ID 082925-01-BOD**

**Method Blank**

Analyte	MB	Flags	MDL	MRL	CRDL	Analyst	Date/Time
BOD	0.12		0.3	0.9		SMK	08/29/25 14:55

**LCS**

Analyte	LCS	Flags	Spike Amount	Percent Recovery	Limits	Analyst	Date/Time
BOD	197.25		210.8	93.57	85-115	SMK	08/29/25 14:55

**Sample Duplicate**

**Parent ID**

AWL-25-02596-011-1

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
BOD	5.41		6.37	16.3	≤30	SMK	08/29/25 14:55

**Total Suspended Solids SM2540D**

**Batch ID: 090225-01-TSS**

**Method Blank**

Analyte	MB	Flags	MDL	MRL	CRDL	Analyst	Date/Time
Total Suspended Solids	-0.10		5.00	11.13		BKC	9/2/25 15:02

**LCS**

Analyte	LCS	Flags	Spike amount	Percent Recovery	Limits	Analyst	Date/Time
Total Suspended Solids	44.00		47.40	92.83	90-110	BKC	9/2/25 15:02

**Sample Duplicate**

**Parent ID:**

AWL-25-02593-001

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
Total Suspended Solids	20.40		18.00	12.5	≤20	BKC	9/2/25 15:02

**Sample Duplicate 2**

**Parent ID:**

N/A

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
Total Suspended Solids	N/A		N/A	#VALUE!	≤20	N/A	N/A

**AWL Chain of Custody**

Custody form MUST be signed  
Please provide as much information as possible



AWL-25- 02596

<b>Client/Company Name &amp; Address:</b> HDR Inc. 582 E. 36th Ave. Suite 500 Anchorage, AK 99503-4169		<b>Public Water System (PWS) ID:</b> Non PWS <b>Project Name/ID:</b> Storm Event #2		<b>Quote Number:</b> AWL #		<b>AWL Staff:</b>			
<b>Contact Person:</b> Cindy Helmericks Phone No: 907.644.2017 (o)   907.231.9305 (c) Fax No: ---		<b>Standard:</b> X Expedited (prior authorization required)		<b>Account #:</b>		<b>Check:</b>			
<b>E-mail:</b> Cynthia.Helmericks@hdrinc.com		<b>Requested Date for Results:</b>		<b>Invoice Contact Name &amp; Address &amp; Phone:</b> HDR Inc. ATTN: Calley Hall 582 E. 36th Ave. Suite 500, Anchorage, AK 99503-4169 calley.hall@hdrinc.com 907-644-2123		<b>PO/Contract No.:</b> 10427839, Task 1-0			
<b>Special Instructions/Requirements:</b>		<b>Results to STATE:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		<b>Requested Analysis/Method</b>		<b>Comments</b>			
<b>Kit Preparation/Shipping Charge:</b>		<b>Specify if REPEAT sample</b>		EPA 200.8/2340B - Total Hardness: HNO3 EPA 625 SIM - TAqH EPA 624 - TAH Preservative: HCl		Field Dup			
<b>Client Sample Identification</b> (Name, Designation, Location, etc.)		5210B - BOD 2540B - Total Suspended Solids 9222D - Fecal Coliform Preserv.: Na2SO4		200.8 - Dissolved Cu (Lab Filter) EPA 200.8/2340B - Total Hardness: HNO3 EPA 625 SIM - TAqH EPA 624 - TAH Preservative: HCl		Comments			
*SWM 03-02 *SWM 04-02 *SWM 05-02 *SWM 06-02 *SWM 07-02 *SWM 08-02 *SWM 08-02 Dup *SWM 09A-02 *SWM 10-02 *SWM 11-02		Date Sampled 8/28/25 8/28/25 8/28/25 8/28/25 8/28/25 8/28/25 8/28/25 8/28/25 8/28/25		Time Sampled 11:33 11:43 16:25 09:48 08:18 08:28 09:20 08:58 12:15		Matrix (DW, WW, SO) WS WS WS WS WS WS WS WS WS		No. of Containers 4 4 8 4 8 4 4 8 4 4	
<b>Relinquished by:</b> Margaret Zhu Date: 8/28/25 Time: 13:47		<b>Received by:</b> MOC Date: 8/28/25 Time: 13:47		Section To Be Completed by AWL		Custody Seal (circle): Intact			
<b>Relinquished by:</b> Margaret Zhu Date: 8/28/25 Time: 13:47		<b>Received by:</b> MOC Date: 8/28/25 Time: 13:47		Temperature on arrival: See Below °C		Thermo ID: 136A			
<b>Relinquished by:</b> Margaret Zhu Date: 8/28/2025 Time: 08:03AM		<b>Received by:</b> Margaret Zhu / Chris Keil Date: 8/28/2025 Time: 08:03AM		Temp: 7.4 Cooler		Rev Notes: No VOA Bubbles call Handness pH < 2 o/cu Filtered & preserved @ 4°C			
<b>Name of Sampler: (printed)</b> Margaret Zhu		Ice: Frozen		Delivery Method (Circle): Hand		Courier: USPS/Mail			

(Dark Blue #1 11.5 c 136A) (Dark Blue #2 7.4 c 136A)  
 (Teal Blue #3 4.3 c 136A)  
 \*SWM 07-02 Time sampled: 08:03AM  
 8/28/2025 MZ  
 Page 31 of 70

**AWL Chain of Custody**  
Custody form **MUST** be signed  
Please provide as much information as possible



Alaska Water Laboratories  
281 N Main st, Suite # 101  
Wasilla, AK 99654  
907-373-6130

AWL-AS-00210

Client/Company Name & Address: HDR Inc. 582 E. 36th Ave. Suite 500 Anchorage, AK 99503-4169		Public Water System (PWS) ID: Project Name/ID:	
Contact Person: Cindy Helmericks Phone No: 907.644.2017 (o)   907.231.9305 (c) Fax No: ---		Turnaround Time (TAT) for Results <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Expedited (prior authorization required) *Specify Requested Due Date if not standard	
E-mail: Cynthia.Helmericks@hdrinc.com		Requested Date for Results: Results to STATE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Special Instructions/Requirements:		Routine Non-Routine Specify if REPEAT sample	
Quote Number		AWL Staff	
Account #:		AWL #	
Invoice Contact Name & Address & Phone: HDR Inc. ATTN: Calley Hall 582 E. 36th Ave. Suite 500, Anchorage, AK 99503-4169 calley.hall@hdrinc.com 907-644-2123		Check Credit	
PO/Contract No.: 10427839, Task 1.0			

Kit Preparation/Shipping Charge:	Client Sample Identification (Name, Designation, Location, etc.)	Date Sampled	Time Sampled	Matrix (DW, WW, SO)	No. of Containers	Requested Analysis/Method		Comments
						5210B - BOD	2540D - Total Suspended Solids	
15 WMM 12-02		8/28/25	10:50	WS	19	<input checked="" type="checkbox"/>	9222D - Fecal Coliform Preserv.: Na2SO4	
16 WMM 12-02 DUP		8/28/25	11:05	WS	8	<input checked="" type="checkbox"/>	200.8 - Dissolved Cu (Lab Filter)	
17 WMM TripBlank-02		8/28/25	08:05	WS	2	<input checked="" type="checkbox"/>	Hardness Preserv.: HNO3	
						<input checked="" type="checkbox"/>	EPA 200.8/2340B - Total	
						<input checked="" type="checkbox"/>	Preservative: HCl	
						<input checked="" type="checkbox"/>	EPA 625 SIM - TAqH	
						<input checked="" type="checkbox"/>	EPA 624 - TAH	
						<input checked="" type="checkbox"/>	Preservative: HCl	
						<input checked="" type="checkbox"/>		Prim. MS/MSD
						<input checked="" type="checkbox"/>		Field dup
						<input checked="" type="checkbox"/>		Trip Blanks (2)

Relinquished by:		Date	Time	Received by:	Date	Time
Relinquished by:		Date	Time	Received by:	Date	Time
Relinquished by:		Date	Time	Received by:	Date	Time
Name of Sampler: (printed)		Temperature on arrival: °C		Custody Seal (circle):		Thermo ID
				Intact		Broken
				Absent		Recv Notes:
		Temp		TB		Cooler
		Ice		Frozen		Wet
				Delivery Method (Circle)		Courier
				USPS/Mail		Hand



# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Mary Curry  
Alaska Water Laboratories  
281 North Main Street  
Suite 101  
Wasilla, Alaska 99654

Generated 9/12/2025 11:35:07 AM

## JOB DESCRIPTION

AWL-25-02596

## JOB NUMBER

280-212807-1

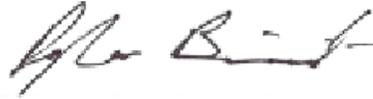
# Eurofins Denver

## 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 TestAmerica Project Manager.

## Authorization



Generated  
9/12/2025 11:35:07 AM

Authorized for release by  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Method Summary . . . . .	8
Sample Summary . . . . .	9
Client Sample Results . . . . .	10
Surrogate Summary . . . . .	19
QC Sample Results . . . . .	20
QC Association . . . . .	27
Chronicle . . . . .	30
Certification Summary . . . . .	34
Chain of Custody . . . . .	35
Receipt Checklists . . . . .	38

# Definitions/Glossary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Case Narrative

Client: Alaska Water Laboratories  
Project: AWL-25-02596

Job ID: 280-212807-1

**Job ID: 280-212807-1**

**Eurofins Denver**

## Job Narrative 280-212807-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 9/3/2025 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

### Method 624.1 - Volatile Organic Compounds (GC/MS)

Samples AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5), AWL-25-02596-008 (280-212807-8), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD), AWL-25-02596-012 (280-212807-12) and AWL-25-02596-013 (280-212807-13) were analyzed for Volatile Organic Compounds (GC/MS). The samples were analyzed on 9/5/2025 and 9/8/2025.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-712089. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. The associated samples are: AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5) and AWL-25-02596-008 (280-212807-8).

### Method 625.1 - Semivolatile Organic Compounds (GC/MS)

Samples AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5), AWL-25-02596-008 (280-212807-8), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Semivolatile Organic Compounds (GC/MS). The samples were prepared on 9/4/2025 and analyzed on 9/5/2025.

### Method 200.7 Rev 4.4 - Metals (ICP)

Samples AWL-25-02596-001 (280-212807-1), AWL-25-02596-002 (280-212807-2), AWL-25-02596-003 (280-212807-3), AWL-25-02596-004 (280-212807-4), AWL-25-02596-005 (280-212807-5), AWL-25-02596-006 (280-212807-6), AWL-25-02596-007 (280-212807-7), AWL-25-02596-008 (280-212807-8), AWL-25-02596-009 (280-212807-9), AWL-25-02596-010 (280-212807-10), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Metals (ICP). The samples were prepared on 9/3/2025 and analyzed on 9/4/2025.

### Method 200.8 - Metals (ICP/MS) - Dissolved

Samples AWL-25-02596-001 (280-212807-1), AWL-25-02596-002 (280-212807-2), AWL-25-02596-003 (280-212807-3), AWL-25-02596-004 (280-212807-4), AWL-25-02596-005 (280-212807-5), AWL-25-02596-006 (280-212807-6), AWL-25-02596-007 (280-212807-7), AWL-25-02596-008 (280-212807-8), AWL-25-02596-009 (280-212807-9), AWL-25-02596-010 (280-212807-10), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 9/3/2025 and analyzed on 9/10/2025 and 9/11/2025.

Eurofins Denver

# Detection Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Client Sample ID: AWL-25-02596-001

## Lab Sample ID: 280-212807-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	18000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6600		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.4	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-002

## Lab Sample ID: 280-212807-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	23000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6100		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.9		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-003

## Lab Sample ID: 280-212807-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	17000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2600		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.9		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-004

## Lab Sample ID: 280-212807-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6900		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1700		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.7	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-005

## Lab Sample ID: 280-212807-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	3400		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.3		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-006

## Lab Sample ID: 280-212807-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	4200		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	970		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.6	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-007

## Lab Sample ID: 280-212807-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	4800		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	990		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.7	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-008

## Lab Sample ID: 280-212807-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	21000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	3400		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.4	J	2.0	1.0	ug/L	1		200.8	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

# Detection Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Client Sample ID: AWL-25-02596-009

## Lab Sample ID: 280-212807-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	22000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	5800		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.9	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-010

## Lab Sample ID: 280-212807-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	17000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2200		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.5		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-011

## Lab Sample ID: 280-212807-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	24000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.4		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-012

## Lab Sample ID: 280-212807-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	24000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.4		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-013

## Lab Sample ID: 280-212807-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Denver

# Method Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET DEN
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
625	Liquid-Liquid Extraction	EPA	EET DEN

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
280-212807-1	AWL-25-02596-001	Water	08/28/25 11:33	09/03/25 09:55	Alaska
280-212807-2	AWL-25-02596-002	Water	08/28/25 11:43	09/03/25 09:55	Alaska
280-212807-3	AWL-25-02596-003	Water	08/28/25 10:25	09/03/25 09:55	Alaska
280-212807-4	AWL-25-02596-004	Water	08/28/25 09:48	09/03/25 09:55	Alaska
280-212807-5	AWL-25-02596-005	Water	08/28/25 08:03	09/03/25 09:55	Alaska
280-212807-6	AWL-25-02596-006	Water	08/28/25 08:18	09/03/25 09:55	Alaska
280-212807-7	AWL-25-02596-007	Water	08/28/25 08:28	09/03/25 09:55	Alaska
280-212807-8	AWL-25-02596-008	Water	08/28/25 09:20	09/03/25 09:55	Alaska
280-212807-9	AWL-25-02596-009	Water	08/28/25 08:58	09/03/25 09:55	Alaska
280-212807-10	AWL-25-02596-010	Water	08/28/25 12:15	09/03/25 09:55	Alaska
280-212807-11	AWL-25-02596-011	Water	08/28/25 10:50	09/03/25 09:55	Alaska
280-212807-12	AWL-25-02596-012	Water	08/28/25 11:05	09/03/25 09:55	Alaska
280-212807-13	AWL-25-02596-013	Water	08/28/25 08:03	09/03/25 09:55	Alaska

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-003**

**Date Collected: 08/28/25 10:25**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100		73 - 122					09/05/25 12:16	1
Toluene-d8 (Surr)	97		80 - 120					09/05/25 12:16	1
4-Bromofluorobenzene (Surr)	99		79 - 119					09/05/25 12:16	1

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	101		73 - 122					09/05/25 12:36	1
Toluene-d8 (Surr)	98		80 - 120					09/05/25 12:36	1
4-Bromofluorobenzene (Surr)	100		79 - 119					09/05/25 12:36	1

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	104		73 - 122					09/05/25 12:57	1
Toluene-d8 (Surr)	97		80 - 120					09/05/25 12:57	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		79 - 119		09/05/25 12:57	1

**Client Sample ID: AWL-25-02596-011**

**Date Collected: 08/28/25 10:50**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		73 - 122		09/08/25 08:18	1
Toluene-d8 (Surr)	105		80 - 120		09/08/25 08:18	1
4-Bromofluorobenzene (Surr)	102		79 - 119		09/08/25 08:18	1

**Client Sample ID: AWL-25-02596-012**

**Date Collected: 08/28/25 11:05**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		73 - 122		09/08/25 08:39	1
Toluene-d8 (Surr)	106		80 - 120		09/08/25 08:39	1
4-Bromofluorobenzene (Surr)	102		79 - 119		09/08/25 08:39	1

**Client Sample ID: AWL-25-02596-013**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 06:31	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-013**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		73 - 122					09/08/25 06:31	1
Toluene-d8 (Surr)	106		80 - 120					09/08/25 06:31	1
4-Bromofluorobenzene (Surr)	104		79 - 119					09/08/25 06:31	1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-003**

**Date Collected: 08/28/25 10:25**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Acenaphthylene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Anthracene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[a]anthracene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[b]fluoranthene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[k]fluoranthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[a]pyrene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Chrysene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Dibenz(a,h)anthracene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Fluoranthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Fluorene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Indeno[1,2,3-cd]pyrene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Naphthalene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Phenanthrene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Pyrene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[g,h,i]perylene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		22 - 120				09/04/25 14:30	09/05/25 18:19	1
2-Fluorophenol	45		23 - 120				09/04/25 14:30	09/05/25 18:19	1
2,4,6-Tribromophenol	87		41 - 134				09/04/25 14:30	09/05/25 18:19	1
Nitrobenzene-d5	67		36 - 120				09/04/25 14:30	09/05/25 18:19	1
Phenol-d5	34		15 - 120				09/04/25 14:30	09/05/25 18:19	1
Terphenyl-d14	100		54 - 127				09/04/25 14:30	09/05/25 18:19	1

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	67		22 - 120				09/04/25 14:30	09/05/25 18:41	1
2-Fluorophenol	49		23 - 120				09/04/25 14:30	09/05/25 18:41	1
2,4,6-Tribromophenol	91		41 - 134				09/04/25 14:30	09/05/25 18:41	1
Nitrobenzene-d5	73		36 - 120				09/04/25 14:30	09/05/25 18:41	1
Phenol-d5	38		15 - 120				09/04/25 14:30	09/05/25 18:41	1
Terphenyl-d14	107		54 - 127				09/04/25 14:30	09/05/25 18:41	1

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Acenaphthylene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Anthracene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[a]anthracene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[b]fluoranthene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[k]fluoranthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[a]pyrene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
Chrysene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Dibenz(a,h)anthracene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Fluoranthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Fluorene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Indeno[1,2,3-cd]pyrene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Naphthalene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Phenanthrene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Pyrene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[g,h,i]perylene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		22 - 120				09/04/25 14:30	09/05/25 19:04	1
2-Fluorophenol	49		23 - 120				09/04/25 14:30	09/05/25 19:04	1
2,4,6-Tribromophenol	95		41 - 134				09/04/25 14:30	09/05/25 19:04	1
Nitrobenzene-d5	75		36 - 120				09/04/25 14:30	09/05/25 19:04	1
Phenol-d5	34		15 - 120				09/04/25 14:30	09/05/25 19:04	1
Terphenyl-d14	105		54 - 127				09/04/25 14:30	09/05/25 19:04	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-011**

**Date Collected: 08/28/25 10:50**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	66		22 - 120				09/04/25 14:30	09/05/25 19:26	1
2-Fluorophenol	48		23 - 120				09/04/25 14:30	09/05/25 19:26	1
2,4,6-Tribromophenol	94		41 - 134				09/04/25 14:30	09/05/25 19:26	1
Nitrobenzene-d5	73		36 - 120				09/04/25 14:30	09/05/25 19:26	1
Phenol-d5	35		15 - 120				09/04/25 14:30	09/05/25 19:26	1
Terphenyl-d14	96		54 - 127				09/04/25 14:30	09/05/25 19:26	1

**Client Sample ID: AWL-25-02596-012**

**Date Collected: 08/28/25 11:05**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Acenaphthylene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Anthracene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[a]anthracene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[b]fluoranthene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[k]fluoranthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[a]pyrene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Chrysene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Dibenz(a,h)anthracene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Fluoranthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Fluorene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Indeno[1,2,3-cd]pyrene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Naphthalene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Phenanthrene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Pyrene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[g,h,i]perylene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		22 - 120				09/04/25 14:30	09/05/25 20:32	1
2-Fluorophenol	48		23 - 120				09/04/25 14:30	09/05/25 20:32	1
2,4,6-Tribromophenol	93		41 - 134				09/04/25 14:30	09/05/25 20:32	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-012**  
**Date Collected: 08/28/25 11:05**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73		36 - 120	09/04/25 14:30	09/05/25 20:32	1
Phenol-d5	36		15 - 120	09/04/25 14:30	09/05/25 20:32	1
Terphenyl-d14	104		54 - 127	09/04/25 14:30	09/05/25 20:32	1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP)

**Client Sample ID: AWL-25-02596-001**  
**Date Collected: 08/28/25 11:33**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	18000		200	60	ug/L		09/03/25 18:24	09/04/25 18:00	1
Magnesium	6600		200	50	ug/L		09/03/25 18:24	09/04/25 18:00	1

**Client Sample ID: AWL-25-02596-002**  
**Date Collected: 08/28/25 11:43**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	23000		200	60	ug/L		09/03/25 18:24	09/04/25 18:04	1
Magnesium	6100		200	50	ug/L		09/03/25 18:24	09/04/25 18:04	1

**Client Sample ID: AWL-25-02596-003**  
**Date Collected: 08/28/25 10:25**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	17000		200	60	ug/L		09/03/25 18:24	09/04/25 18:08	1
Magnesium	2600		200	50	ug/L		09/03/25 18:24	09/04/25 18:08	1

**Client Sample ID: AWL-25-02596-004**  
**Date Collected: 08/28/25 09:48**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6900		200	60	ug/L		09/03/25 18:24	09/04/25 18:13	1
Magnesium	1700		200	50	ug/L		09/03/25 18:24	09/04/25 18:13	1

**Client Sample ID: AWL-25-02596-005**  
**Date Collected: 08/28/25 08:03**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	3400		200	60	ug/L		09/03/25 18:24	09/04/25 18:17	1
Magnesium	1300		200	50	ug/L		09/03/25 18:24	09/04/25 18:17	1

**Client Sample ID: AWL-25-02596-006**  
**Date Collected: 08/28/25 08:18**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4200		200	60	ug/L		09/03/25 18:24	09/04/25 18:21	1
Magnesium	970		200	50	ug/L		09/03/25 18:24	09/04/25 18:21	1

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Client Sample ID: AWL-25-02596-007

Date Collected: 08/28/25 08:28

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4800		200	60	ug/L		09/03/25 18:24	09/04/25 18:26	1
Magnesium	990		200	50	ug/L		09/03/25 18:24	09/04/25 18:26	1

Client Sample ID: AWL-25-02596-008

Date Collected: 08/28/25 09:20

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	21000		200	60	ug/L		09/03/25 18:24	09/04/25 18:43	1
Magnesium	3400		200	50	ug/L		09/03/25 18:24	09/04/25 18:43	1

Client Sample ID: AWL-25-02596-009

Date Collected: 08/28/25 08:58

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	22000		200	60	ug/L		09/03/25 18:24	09/04/25 18:47	1
Magnesium	5800		200	50	ug/L		09/03/25 18:24	09/04/25 18:47	1

Client Sample ID: AWL-25-02596-010

Date Collected: 08/28/25 12:15

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	17000		200	60	ug/L		09/03/25 18:24	09/04/25 18:52	1
Magnesium	2200		200	50	ug/L		09/03/25 18:24	09/04/25 18:52	1

Client Sample ID: AWL-25-02596-011

Date Collected: 08/28/25 10:50

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24000		200	60	ug/L		09/03/25 18:24	09/04/25 18:56	1
Magnesium	6300		200	50	ug/L		09/03/25 18:24	09/04/25 18:56	1

Client Sample ID: AWL-25-02596-012

Date Collected: 08/28/25 11:05

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24000		200	60	ug/L		09/03/25 18:24	09/04/25 19:18	1
Magnesium	6300		200	50	ug/L		09/03/25 18:24	09/04/25 19:18	1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02596-001

Date Collected: 08/28/25 11:33

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.4	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:28	1

Client Sample ID: AWL-25-02596-002

Date Collected: 08/28/25 11:43

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.9		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:31	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02596-003

Date Collected: 08/28/25 10:25

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.9		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:35	1

Client Sample ID: AWL-25-02596-004

Date Collected: 08/28/25 09:48

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.7	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:39	1

Client Sample ID: AWL-25-02596-005

Date Collected: 08/28/25 08:03

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.3		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:42	1

Client Sample ID: AWL-25-02596-006

Date Collected: 08/28/25 08:18

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.6	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:46	1

Client Sample ID: AWL-25-02596-007

Date Collected: 08/28/25 08:28

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.7	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:49	1

Client Sample ID: AWL-25-02596-008

Date Collected: 08/28/25 09:20

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.4	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:53	1

Client Sample ID: AWL-25-02596-009

Date Collected: 08/28/25 08:58

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.9	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 09:04	1

Client Sample ID: AWL-25-02596-010

Date Collected: 08/28/25 12:15

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.5		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 09:07	1

Client Sample ID: AWL-25-02596-011

Date Collected: 08/28/25 10:50

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.4		2.0	1.0	ug/L		09/03/25 16:44	09/11/25 09:23	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02596-012

Date Collected: 08/28/25 11:05

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.4		2.0	1.0	ug/L		09/03/25 16:45	09/10/25 11:58	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Surrogate Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DCA (73-122)	TOL (80-120)	BFB (79-119)
280-212807-3	AWL-25-02596-003	100	97	99
280-212807-5	AWL-25-02596-005	101	98	100
280-212807-8	AWL-25-02596-008	104	97	101
280-212807-11	AWL-25-02596-011	99	105	102
280-212807-11 MS	AWL-25-02596-011	101	102	101
280-212807-11 MSD	AWL-25-02596-011	101	105	102
280-212807-12	AWL-25-02596-012	101	106	102
280-212807-13	AWL-25-02596-013	100	106	104
LCS 280-712089/4	Lab Control Sample	103	100	100
LCS 280-712325/4	Lab Control Sample	101	102	99
LCSD 280-712089/5	Lab Control Sample Dup	101	99	99
LCSD 280-712325/5	Lab Control Sample Dup	101	103	102
MB 280-712089/9	Method Blank	99	99	99
MB 280-712325/9	Method Blank	102	106	102

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (22-120)	2FP (23-120)	TBP (41-134)	NBZ (36-120)	PHL (15-120)	TPHL (54-127)
280-212807-3	AWL-25-02596-003	63	45	87	67	34	100
280-212807-5	AWL-25-02596-005	67	49	91	73	38	107
280-212807-8	AWL-25-02596-008	69	49	95	75	34	105
280-212807-11	AWL-25-02596-011	66	48	94	73	35	96
280-212807-11 MS	AWL-25-02596-011	65	41	87	66	32	96
280-212807-11 MSD	AWL-25-02596-011	65	42	90	65	33	98
280-212807-12	AWL-25-02596-012	63	48	93	73	36	104
LCS 280-712008/2-A	Lab Control Sample	90	61	99	95	44	100
MB 280-712008/1-A	Method Blank	79	53	81	89	37	100

#### Surrogate Legend

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

TBP = 2,4,6-Tribromophenol

NBZ = Nitrobenzene-d5

PHL = Phenol-d5

TPHL = Terphenyl-d14

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-712089/9**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		73 - 122		09/05/25 09:32	1
Toluene-d8 (Surr)	99		80 - 120		09/05/25 09:32	1
4-Bromofluorobenzene (Surr)	99		79 - 119		09/05/25 09:32	1

**Lab Sample ID: LCS 280-712089/4**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	65 - 135
1,3-Dichlorobenzene	50.0	46.5		ug/L		93	70 - 130
1,4-Dichlorobenzene	50.0	45.8		ug/L		92	65 - 135
Benzene	50.0	51.6		ug/L		103	65 - 135
Ethylbenzene	50.0	50.2		ug/L		100	60 - 140
Toluene	50.0	50.9		ug/L		102	70 - 130
Total BTEX	250	253		ug/L		101	80 - 120
Xylenes, Total	100	101		ug/L		101	80 - 120
Chlorobenzene	50.0	50.0		ug/L		100	65 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		73 - 122
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		79 - 119

**Lab Sample ID: LCSD 280-712089/5**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
1,2-Dichlorobenzene	50.0	46.2		ug/L		92	65 - 135	0	30
1,3-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 130	0	30
1,4-Dichlorobenzene	50.0	45.6		ug/L		91	65 - 135	0	30
Benzene	50.0	52.0		ug/L		104	65 - 135	1	30
Ethylbenzene	50.0	49.0		ug/L		98	60 - 140	2	30
Toluene	50.0	50.8		ug/L		102	70 - 130	0	30
Total BTEX	250	251		ug/L		100	80 - 120	1	30
Xylenes, Total	100	98.7		ug/L		99	80 - 120	2	30

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 280-712089/5**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	50.0	49.1		ug/L		98	65 - 135	2	30
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	101		73 - 122						
Toluene-d8 (Surr)	99		80 - 120						
4-Bromofluorobenzene (Surr)	99		79 - 119						

**Lab Sample ID: MB 280-712325/9**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	102		73 - 122				09/08/25 06:05	1	
Toluene-d8 (Surr)	106		80 - 120				09/08/25 06:05	1	
4-Bromofluorobenzene (Surr)	102		79 - 119				09/08/25 06:05	1	

**Lab Sample ID: LCS 280-712325/4**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	65 - 135
1,3-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 130
1,4-Dichlorobenzene	50.0	51.0		ug/L		102	65 - 135
Benzene	50.0	53.2		ug/L		106	65 - 135
Ethylbenzene	50.0	51.1		ug/L		102	60 - 140
Toluene	50.0	51.0		ug/L		102	70 - 130
Total BTEX	250	257		ug/L		103	80 - 120
Xylenes, Total	100	102		ug/L		102	80 - 120
Chlorobenzene	50.0	49.8		ug/L		100	65 - 135
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	101		73 - 122				
Toluene-d8 (Surr)	102		80 - 120				
4-Bromofluorobenzene (Surr)	99		79 - 119				

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 280-712325/5**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	51.2		ug/L		102	65 - 135	6	30
1,3-Dichlorobenzene	50.0	51.1		ug/L		102	70 - 130	7	30
1,4-Dichlorobenzene	50.0	53.7		ug/L		107	65 - 135	5	30
Benzene	50.0	52.8		ug/L		106	65 - 135	1	30
Ethylbenzene	50.0	52.1		ug/L		104	60 - 140	2	30
Toluene	50.0	51.1		ug/L		102	70 - 130	0	30
Total BTEX	250	260		ug/L		104	80 - 120	1	30
Xylenes, Total	100	104		ug/L		104	80 - 120	2	30
Chlorobenzene	50.0	51.0		ug/L		102	65 - 135	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		73 - 122
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	102		79 - 119

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	ND		25.0	24.5		ug/L		98	18 - 190
1,3-Dichlorobenzene	ND		25.0	24.4		ug/L		98	59 - 156
1,4-Dichlorobenzene	ND		25.0	26.2		ug/L		105	18 - 190
Benzene	ND		25.0	26.8		ug/L		107	37 - 151
Ethylbenzene	ND		25.0	26.1		ug/L		104	37 - 162
Toluene	ND		25.0	25.6		ug/L		102	47 - 150
Total BTEX	ND		125	131		ug/L		104	80 - 120
Xylenes, Total	ND		50.0	52.0		ug/L		104	80 - 120
Chlorobenzene	ND		25.0	25.4		ug/L		102	37 - 160

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		73 - 122
Toluene-d8 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	101		79 - 119

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichlorobenzene	ND		25.0	26.1		ug/L		104	18 - 190	6	30
1,3-Dichlorobenzene	ND		25.0	26.1		ug/L		104	59 - 156	7	30
1,4-Dichlorobenzene	ND		25.0	27.5		ug/L		110	18 - 190	5	30
Benzene	ND		25.0	27.7		ug/L		111	37 - 151	4	30
Ethylbenzene	ND		25.0	28.0		ug/L		112	37 - 162	7	30
Toluene	ND		25.0	26.6		ug/L		106	47 - 150	4	30
Total BTEX	ND		125	137		ug/L		110	80 - 120	5	30
Xylenes, Total	ND		50.0	54.6		ug/L		109	80 - 120	5	30

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	ND		25.0	26.6		ug/L		106	37 - 160	4	30
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>MSD Limits</b>								
1,2-Dichloroethane-d4 (Surr)	101		73 - 122								
Toluene-d8 (Surr)	105		80 - 120								
4-Bromofluorobenzene (Surr)	102		79 - 119								

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-712008/1-A**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>MB Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	79		22 - 120				09/04/25 14:30	09/05/25 17:12	1
2-Fluorophenol	53		23 - 120				09/04/25 14:30	09/05/25 17:12	1
2,4,6-Tribromophenol	81		41 - 134				09/04/25 14:30	09/05/25 17:12	1
Nitrobenzene-d5	89		36 - 120				09/04/25 14:30	09/05/25 17:12	1
Phenol-d5	37		15 - 120				09/04/25 14:30	09/05/25 17:12	1
Terphenyl-d14	100		54 - 127				09/04/25 14:30	09/05/25 17:12	1

**Lab Sample ID: LCS 280-712008/2-A**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	80.0	70.4		ug/L		88	47 - 145
Acenaphthylene	80.0	71.8		ug/L		90	33 - 145
Anthracene	80.0	77.1		ug/L		96	27 - 133
Benzo[a]anthracene	80.0	76.4		ug/L		96	33 - 143

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 280-712008/2-A**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[b]fluoranthene	80.0	81.1		ug/L		101	24 - 159
Benzo[k]fluoranthene	80.0	77.4		ug/L		97	11 - 162
Benzo[a]pyrene	80.0	77.9		ug/L		97	17 - 163
Chrysene	80.0	72.8		ug/L		91	17 - 168
Dibenz(a,h)anthracene	80.0	78.0		ug/L		98	1 - 227
Fluoranthene	80.0	76.5		ug/L		96	26 - 137
Fluorene	80.0	71.6		ug/L		90	59 - 121
Indeno[1,2,3-cd]pyrene	80.0	79.4		ug/L		99	1 - 171
Naphthalene	80.0	61.9		ug/L		77	21 - 133
Phenanthrene	80.0	75.9		ug/L		95	54 - 120
Pyrene	80.0	77.7		ug/L		97	52 - 120
Benzo[g,h,i]perylene	80.0	74.8		ug/L		94	1 - 219

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	90		22 - 120
2-Fluorophenol	61		23 - 120
2,4,6-Tribromophenol	99		41 - 134
Nitrobenzene-d5	95		36 - 120
Phenol-d5	44		15 - 120
Terphenyl-d14	100		54 - 127

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		80.0	53.4		ug/L		67	47 - 145
Acenaphthylene	ND		80.0	53.4		ug/L		67	33 - 145
Anthracene	ND		80.0	72.8		ug/L		91	27 - 133
Benzo[a]anthracene	ND		80.0	77.0		ug/L		96	33 - 143
Benzo[b]fluoranthene	ND		80.0	82.3		ug/L		103	24 - 159
Benzo[k]fluoranthene	ND		80.0	74.9		ug/L		94	11 - 162
Benzo[a]pyrene	ND		80.0	79.2		ug/L		99	17 - 163
Chrysene	ND		80.0	71.7		ug/L		90	17 - 168
Dibenz(a,h)anthracene	ND		80.0	81.6		ug/L		102	1 - 227
Fluoranthene	ND		80.0	75.5		ug/L		94	26 - 137
Fluorene	ND		80.0	58.9		ug/L		74	59 - 121
Indeno[1,2,3-cd]pyrene	ND		80.0	82.7		ug/L		103	1 - 171
Naphthalene	ND		80.0	41.5		ug/L		52	21 - 133
Phenanthrene	ND		80.0	70.5		ug/L		88	54 - 120
Pyrene	ND		80.0	77.2		ug/L		96	52 - 120
Benzo[g,h,i]perylene	ND		80.0	80.2		ug/L		100	1 - 219

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	65		22 - 120
2-Fluorophenol	41		23 - 120
2,4,6-Tribromophenol	87		41 - 134
Nitrobenzene-d5	66		36 - 120

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Surrogate	MS %Recovery	MS Qualifier	Limits
Phenol-d5	32		15 - 120
Terphenyl-d14	96		54 - 127

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		80.0	51.4		ug/L		64	47 - 145	4	48
Acenaphthylene	ND		80.0	52.0		ug/L		65	33 - 145	3	74
Anthracene	ND		80.0	69.5		ug/L		87	27 - 133	5	66
Benzo[a]anthracene	ND		80.0	74.1		ug/L		93	33 - 143	4	53
Benzo[b]fluoranthene	ND		80.0	79.1		ug/L		99	24 - 159	4	71
Benzo[k]fluoranthene	ND		80.0	71.1		ug/L		89	11 - 162	5	63
Benzo[a]pyrene	ND		80.0	73.9		ug/L		92	17 - 163	7	72
Chrysene	ND		80.0	69.0		ug/L		86	17 - 168	4	87
Dibenz(a,h)anthracene	ND		80.0	76.3		ug/L		95	1 - 227	7	126
Fluoranthene	ND		80.0	71.3		ug/L		89	26 - 137	6	66
Fluorene	ND		80.0	59.1		ug/L		74	59 - 121	0	38
Indeno[1,2,3-cd]pyrene	ND		80.0	78.4		ug/L		98	1 - 171	5	99
Naphthalene	ND		80.0	37.8		ug/L		47	21 - 133	9	65
Phenanthrene	ND		80.0	67.5		ug/L		84	54 - 120	4	39
Pyrene	ND		80.0	75.5		ug/L		94	52 - 120	2	49
Benzo[g,h,i]perylene	ND		80.0	76.6		ug/L		96	1 - 219	5	97

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	65		22 - 120
2-Fluorophenol	42		23 - 120
2,4,6-Tribromophenol	90		41 - 134
Nitrobenzene-d5	65		36 - 120
Phenol-d5	33		15 - 120
Terphenyl-d14	98		54 - 127

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID: MB 280-711887/1-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	60	ug/L		09/03/25 18:24	09/04/25 17:51	1
Magnesium	ND		200	50	ug/L		09/03/25 18:24	09/04/25 17:51	1

**Lab Sample ID: LCS 280-711887/2-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	47800		ug/L		96	85 - 115

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

**Lab Sample ID: LCS 280-711887/2-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	50000	46800		ug/L		94	85 - 115

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	24000		50000	70100		ug/L		93	75 - 125
Magnesium	6300		50000	52200		ug/L		92	75 - 125

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	24000		50000	69800		ug/L		93	75 - 125	0	20
Magnesium	6300		50000	52200		ug/L		92	75 - 125	0	20

## Method: 200.8 - Metals (ICP/MS)

**Lab Sample ID: MB 280-711870/1-A**  
**Matrix: Water**  
**Analysis Batch: 712808**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 711870**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:13	1

**Lab Sample ID: LCS 280-711870/2-A**  
**Matrix: Water**  
**Analysis Batch: 712808**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 711870**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	41.8		ug/L		104	90 - 115

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712931**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Dissolved**  
**Prep Batch: 711870**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	3.4		40.0	42.8		ug/L		98	90 - 115

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712931**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Dissolved**  
**Prep Batch: 711870**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	3.4		40.0	42.5		ug/L		98	90 - 115	1	20

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## GC/MS VOA

### Analysis Batch: 712089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	624.1	
280-212807-5	AWL-25-02596-005	Total/NA	Water	624.1	
280-212807-8	AWL-25-02596-008	Total/NA	Water	624.1	
MB 280-712089/9	Method Blank	Total/NA	Water	624.1	
LCS 280-712089/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-712089/5	Lab Control Sample Dup	Total/NA	Water	624.1	

### Analysis Batch: 712325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-11	AWL-25-02596-011	Total/NA	Water	624.1	
280-212807-12	AWL-25-02596-012	Total/NA	Water	624.1	
280-212807-13	AWL-25-02596-013	Total/NA	Water	624.1	
MB 280-712325/9	Method Blank	Total/NA	Water	624.1	
LCS 280-712325/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-712325/5	Lab Control Sample Dup	Total/NA	Water	624.1	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	624.1	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	624.1	

## GC/MS Semi VOA

### Prep Batch: 712008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	625	
280-212807-5	AWL-25-02596-005	Total/NA	Water	625	
280-212807-8	AWL-25-02596-008	Total/NA	Water	625	
280-212807-11	AWL-25-02596-011	Total/NA	Water	625	
280-212807-12	AWL-25-02596-012	Total/NA	Water	625	
MB 280-712008/1-A	Method Blank	Total/NA	Water	625	
LCS 280-712008/2-A	Lab Control Sample	Total/NA	Water	625	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	625	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	625	

### Analysis Batch: 712240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	625.1	712008
280-212807-5	AWL-25-02596-005	Total/NA	Water	625.1	712008
280-212807-8	AWL-25-02596-008	Total/NA	Water	625.1	712008
280-212807-11	AWL-25-02596-011	Total/NA	Water	625.1	712008
280-212807-12	AWL-25-02596-012	Total/NA	Water	625.1	712008
MB 280-712008/1-A	Method Blank	Total/NA	Water	625.1	712008
LCS 280-712008/2-A	Lab Control Sample	Total/NA	Water	625.1	712008
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	625.1	712008
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	625.1	712008

## Metals

### Prep Batch: 711870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Dissolved	Water	200.8	
280-212807-2	AWL-25-02596-002	Dissolved	Water	200.8	
280-212807-3	AWL-25-02596-003	Dissolved	Water	200.8	
280-212807-4	AWL-25-02596-004	Dissolved	Water	200.8	

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Metals (Continued)

### Prep Batch: 711870 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-5	AWL-25-02596-005	Dissolved	Water	200.8	
280-212807-6	AWL-25-02596-006	Dissolved	Water	200.8	
280-212807-7	AWL-25-02596-007	Dissolved	Water	200.8	
280-212807-8	AWL-25-02596-008	Dissolved	Water	200.8	
280-212807-9	AWL-25-02596-009	Dissolved	Water	200.8	
280-212807-10	AWL-25-02596-010	Dissolved	Water	200.8	
280-212807-11	AWL-25-02596-011	Dissolved	Water	200.8	
280-212807-12	AWL-25-02596-012	Dissolved	Water	200.8	
MB 280-711870/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-711870/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-212807-11 MS	AWL-25-02596-011	Dissolved	Water	200.8	
280-212807-11 MSD	AWL-25-02596-011	Dissolved	Water	200.8	

### Prep Batch: 711887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Total/NA	Water	200.7	
280-212807-2	AWL-25-02596-002	Total/NA	Water	200.7	
280-212807-3	AWL-25-02596-003	Total/NA	Water	200.7	
280-212807-4	AWL-25-02596-004	Total/NA	Water	200.7	
280-212807-5	AWL-25-02596-005	Total/NA	Water	200.7	
280-212807-6	AWL-25-02596-006	Total/NA	Water	200.7	
280-212807-7	AWL-25-02596-007	Total/NA	Water	200.7	
280-212807-8	AWL-25-02596-008	Total/NA	Water	200.7	
280-212807-9	AWL-25-02596-009	Total/NA	Water	200.7	
280-212807-10	AWL-25-02596-010	Total/NA	Water	200.7	
280-212807-11	AWL-25-02596-011	Total/NA	Water	200.7	
280-212807-12	AWL-25-02596-012	Total/NA	Water	200.7	
MB 280-711887/1-A	Method Blank	Total/NA	Water	200.7	
LCS 280-711887/2-A	Lab Control Sample	Total/NA	Water	200.7	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	200.7	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	200.7	

### Analysis Batch: 712150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-2	AWL-25-02596-002	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-3	AWL-25-02596-003	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-4	AWL-25-02596-004	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-5	AWL-25-02596-005	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-6	AWL-25-02596-006	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-7	AWL-25-02596-007	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-8	AWL-25-02596-008	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-9	AWL-25-02596-009	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-10	AWL-25-02596-010	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-12	AWL-25-02596-012	Total/NA	Water	200.7 Rev 4.4	711887
MB 280-711887/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	711887
LCS 280-711887/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Metals

### Analysis Batch: 712808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Dissolved	Water	200.8	711870
280-212807-2	AWL-25-02596-002	Dissolved	Water	200.8	711870
280-212807-3	AWL-25-02596-003	Dissolved	Water	200.8	711870
280-212807-4	AWL-25-02596-004	Dissolved	Water	200.8	711870
280-212807-5	AWL-25-02596-005	Dissolved	Water	200.8	711870
280-212807-6	AWL-25-02596-006	Dissolved	Water	200.8	711870
280-212807-7	AWL-25-02596-007	Dissolved	Water	200.8	711870
280-212807-8	AWL-25-02596-008	Dissolved	Water	200.8	711870
280-212807-9	AWL-25-02596-009	Dissolved	Water	200.8	711870
280-212807-10	AWL-25-02596-010	Dissolved	Water	200.8	711870
280-212807-12	AWL-25-02596-012	Dissolved	Water	200.8	711870
MB 280-711870/1-A	Method Blank	Total Recoverable	Water	200.8	711870
LCS 280-711870/2-A	Lab Control Sample	Total Recoverable	Water	200.8	711870

### Analysis Batch: 712931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-11	AWL-25-02596-011	Dissolved	Water	200.8	711870
280-212807-11 MS	AWL-25-02596-011	Dissolved	Water	200.8	711870
280-212807-11 MSD	AWL-25-02596-011	Dissolved	Water	200.8	711870

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-001**

**Lab Sample ID: 280-212807-1**

**Date Collected: 08/28/25 11:33**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:00	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:28	LMT	EET DEN

**Client Sample ID: AWL-25-02596-002**

**Lab Sample ID: 280-212807-2**

**Date Collected: 08/28/25 11:43**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:04	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:31	LMT	EET DEN

**Client Sample ID: AWL-25-02596-003**

**Lab Sample ID: 280-212807-3**

**Date Collected: 08/28/25 10:25**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:16	MD	EET DEN
Total/NA	Prep	625			235.2 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 18:19	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:08	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:35	LMT	EET DEN

**Client Sample ID: AWL-25-02596-004**

**Lab Sample ID: 280-212807-4**

**Date Collected: 08/28/25 09:48**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:13	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:39	LMT	EET DEN

**Client Sample ID: AWL-25-02596-005**

**Lab Sample ID: 280-212807-5**

**Date Collected: 08/28/25 08:03**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:36	MD	EET DEN
Total/NA	Prep	625			247.5 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 18:41	PW	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-005**

**Lab Sample ID: 280-212807-5**

**Date Collected: 08/28/25 08:03**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:17	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:42	LMT	EET DEN

**Client Sample ID: AWL-25-02596-006**

**Lab Sample ID: 280-212807-6**

**Date Collected: 08/28/25 08:18**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:21	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:46	LMT	EET DEN

**Client Sample ID: AWL-25-02596-007**

**Lab Sample ID: 280-212807-7**

**Date Collected: 08/28/25 08:28**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:26	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:49	LMT	EET DEN

**Client Sample ID: AWL-25-02596-008**

**Lab Sample ID: 280-212807-8**

**Date Collected: 08/28/25 09:20**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:57	MD	EET DEN
Total/NA	Prep	625			264.8 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 19:04	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:43	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:53	LMT	EET DEN

**Client Sample ID: AWL-25-02596-009**

**Lab Sample ID: 280-212807-9**

**Date Collected: 08/28/25 08:58**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:47	ADL	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-009**

**Lab Sample ID: 280-212807-9**

**Date Collected: 08/28/25 08:58**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 09:04	LMT	EET DEN

**Client Sample ID: AWL-25-02596-010**

**Lab Sample ID: 280-212807-10**

**Date Collected: 08/28/25 12:15**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:52	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 09:07	LMT	EET DEN

**Client Sample ID: AWL-25-02596-011**

**Lab Sample ID: 280-212807-11**

**Date Collected: 08/28/25 10:50**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 08:18	MD	EET DEN
Total/NA	Prep	625			250 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 19:26	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:56	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712931	09/11/25 09:23	LMT	EET DEN

**Client Sample ID: AWL-25-02596-012**

**Lab Sample ID: 280-212807-12**

**Date Collected: 08/28/25 11:05**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 08:39	MD	EET DEN
Total/NA	Prep	625			254 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 20:32	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 19:18	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:45	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 11:58	LMT	EET DEN

**Client Sample ID: AWL-25-02596-013**

**Lab Sample ID: 280-212807-13**

**Date Collected: 08/28/25 08:03**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 06:31	MD	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Accreditation/Certification Summary

Client: Alaska Water Laboratories  
 Project/Site: AWL-25-02596

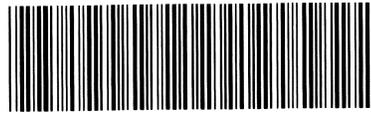
Job ID: 280-212807-1

## Laboratory: Eurofins Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	18-001	11-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Calcium
200.7 Rev 4.4	200.7	Water	Magnesium
624.1		Water	Total BTEX
Oregon	NELAP	4025	01-08-26





<b>FROM:</b> Alaska Water Laboratories LLC. 281 N. Main St, STE 101 Wasilla AK 99654 Mary @AKWaterLabs.com		<b>Sub-Contracted Lab:</b> EET-Denver 4955 Yarrow St Arvada, CO 80002		
<b>Client Project Name:</b>	AWL-25-02596	<b>Certification Required:</b>	Alaska Wastewater	
<b>Requested Due Date (if not standard TAT):</b>	Standard	<b>Notes:</b> Level 2 report	Report to MDL Provide EDD	
Samples				
AWL ID	Collection Date/ Time	Analysis	Comments	Matrix
AWL-25-02596-001-3	08/28/2025 11:33	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-001-4	08/28/2025 11:33	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-002-3	08/28/2025 11:43	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-002-4	08/28/2025 11:43	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-003-3	08/28/2025 10:25	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-003-4	08/28/2025 10:25	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-003-5	08/28/2025 10:25	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-003-6	08/28/2025 10:25	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-004-3	08/28/2025 09:48	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-004-4	08/28/2025 09:48	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-005-3	08/28/2025 08:03	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-005-4	08/28/2025 08:03	200.7	200.7 Ca, Mg ; pH<2	WW

*M. [Signature]*

SEP 02 2025 09 30

*M. EETDEN 9-3-25*

*2-6°C PABUCF-0-20955*



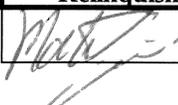
AWL-25-02596-005-5	08/28/2025 08:03	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-005-6	08/28/2025 08:03	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-006-3	08/28/2025 08:18	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-006-4	08/28/2025 08:18	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-007-3	08/28/2025 08:28	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-007-4	08/28/2025 08:28	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-008-3	08/28/2025 09:20	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-008-4	08/28/2025 09:20	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-008-5	08/28/2025 09:20	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-008-6	08/28/2025 09:20	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-009-3	08/28/2025 08:58	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-009-4	08/28/2025 08:58	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-010-3	08/28/2025 12:15	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-010-4	08/28/2025 12:15	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-011-3	08/28/2025 10:50	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL. Primary, MS/MSD - xvol sent	WW
AWL-25-02596-011-4	08/28/2025 10:50	200.7	200.7 Ca, Mg ; pH<2 Primary/MS/MSD - x vol sent	WW

*[Handwritten signature]*

SEP 02 2025 09 30

*[Handwritten signature]* EETDEN 9-3-25  
0955



AWL-25-02596-011-5	08/28/2025 10:50	625 PAH	EPA 625.1 PAH Primary, MS/MSD - xvol sent	WW
AWL-25-02596-011-6	08/28/2025 10:50	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/MSD - xvol sent	WW
AWL-25-02596-012-3	08/28/2025 11:05	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL.	WW
AWL-25-02596-012-4	08/28/2025 11:05	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-012-5	08/28/2025 11:05	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-012-6	08/28/2025 11:05	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-013-1	08/28/2025 08:03	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK	AQ
<b>Relinquished By:</b>	<b>Date &amp; Time:</b>	<b>Received By:</b>	<b>Date &amp; Time:</b>	<b>Temp:</b>
	SEP 02 2025 09:30			

CoC Seal? Y / N

pH:

Ice: Frozen  
Melted / None

<b>Relinquished By:</b>	<b>Date &amp; Time:</b>	<b>Received By:</b>	<b>Date &amp; Time:</b>	<b>Temp:</b>

CoC Seal? Y / N

pH:

Ice: Frozen  
Melted / None

⊕ PAH must be extracted by

Thursday 4-4-25 (max)

M EETDEN 9-3-25  
0955

# Login Sample Receipt Checklist

Client: Alaska Water Laboratories

Job Number: 280-212807-1

**Login Number: 212807**

**List Source: Eurofins Denver**

**List Number: 1**

**Creator: Bieniulis, Dylan T**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





**Appendix C3**  
**Laboratory Data Package**  
**Storm Event #3**



*This page intentionally left blank.*

**Alaska Laboratory AK01000**

**Client** HDR Inc

**Contact** Cindy Helmericks

**Project Name** MOA Stormwater Monitoring - Sampling 2 2025

**AWL #** AWL-25-02596

**PWS #** Non PWS

Please direct any questions regarding the final report to your Project Manager [Alex@AKWaterLabs.com](mailto:Alex@AKWaterLabs.com) or [Mary@AKWaterLabs.com](mailto:Mary@AKWaterLabs.com), or call the lab for general questions.

Alaska Water Laboratories is an approved ADEC certified lab for wet chemistry and Microbiology; the results presented in this report meet the requirement of the laboratory's certifications and internal QC processes. Any exceptions will be noted in the case narratives attached. Subcontract data will be entered into AWL final reports. Full subcontract reports are available upon request.

The attached should contain analytical results for the analyses submitted on the client chain of custody. The information includes no opinions of the analysts or labs, data is represented after meeting certified testing requirements, and quality control measures.

Reproduction of the report requires the written approval of the laboratory.



Alexandria Smoot

Project Manager

09/16/2025

---

AWL Laboratory Management

Date

**Alaska Laboratory #AK01000**

Client Project Name	MOA Stormwater Monitoring - Sampling 2 2025	AWL #	AWL-25-02596
Receipt Date and Time	08/28/2025 13:47	Due Date	09/19/2025
Cooler Temperature (C)	Dark Blue Cooler #1 11.5C 136A; Dark Blue Cooler #2 7.4C 136A; Teal Blue Cooler #3 4.3C	Sampler Initials	MZ CK
Sample receipt comments	Samples received by MCC on 08/28/2025 at Dark Blue Cooler #1 11.5C 136A; Dark Blue Cooler #2 7.4C 136A; Teal Blue Cooler #3 (all VOA Vial's) 4.3C 136A. No Bubbles in VOA Vial's. All Hardness pH< 2, Cu filtered and Preserved at lab		
Log In	VJG 08/28/2025 (Cover Page Only); AKS 08/29/2025	DQO	VJG 08/29/2025

**Samples Received**

Sample Location	AWL ID	Collection Date/Time	Analysis Date/Time	Analysis	Notes
SWM 03-02	AWL-25-02596-001-1	08/28/2025 11:33	9/2/25 15:02	SM2540D	
SWM 03-02	AWL-25-02596-001-1	08/28/2025 11:33	9/2/25 15:02	SM5210B BOD	
SWM 03-02	AWL-25-02596-001-2	08/28/2025 11:33	08/28/25 15:08	SM9222D Fecal Coliform by MF	00247
SWM 03-02	AWL-25-02596-001-3	08/28/2025 11:33	9/10/25 8:28	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 03-02	AWL-25-02596-001-4	08/28/2025 11:33	9/4/25 18:00	200.7	200.7 Ca, Mg ; pH<2
SWM 03-02	AWL-25-02596-001-4	08/28/2025 11:33	9/15/25 08:40	SM2340B	200.7 Ca, Mg ; pH<2
SWM 04-02	AWL-25-02596-002-1	08/28/2025 11:43	9/2/25 15:02	SM5210B BOD	
SWM 04-02	AWL-25-02596-002-1	08/28/2025 11:43	9/2/25 15:02	SM2540D	
SWM 04-02	AWL-25-02596-002-2	08/28/2025 11:43	08/28/25 15:08	SM9222D Fecal Coliform by MF	00249

SWM 04-02	AWL-25-02596-002-3	08/28/2025 11:43	9/10/25 8:31	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 04-02	AWL-25-02596-002-4	08/28/2025 11:43	9/4/25 18:04	200.7	200.7 Ca, Mg ; pH<2
SWM 04-02	AWL-25-02596-002-4	08/28/2025 11:43	9/15/25 08:41	SM2340B	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-1	08/28/2025 10:25	9/2/25 15:02	SM2540D	
SWM 05-02	AWL-25-02596-003-1	08/28/2025 10:25	9/2/25 15:02	SM5210B BOD	
SWM 05-02	AWL-25-02596-003-2	08/28/2025 10:25	08/28/25 15:08	SM9222D Fecal Coliform by MF	00248
SWM 05-02	AWL-25-02596-003-3	08/28/2025 10:25	9/10/25 8:35	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 05-02	AWL-25-02596-003-4	08/28/2025 10:25	9/4/25 18:08	200.7	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-4	08/28/2025 10:25	9/15/25 08:43	SM2340B	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-5	08/28/2025 10:25	9/5/25 18:19	625 PAH	EPA 625.1 PAH
SWM 05-02	AWL-25-02596-003-6	08/28/2025 10:25	9/5/25 12:16	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total

SWM 05-02	AWL-25-02596-003-6	08/28/2025 10:25	9/16/2025 09:47	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 06-02	AWL-25-02596-004-1	08/28/2025 09:48	9/2/25 15:02	SM2540D	
SWM 06-02	AWL-25-02596-004-1	08/28/2025 09:48	9/2/25 15:02	SM5210B BOD	
SWM 06-02	AWL-25-02596-004-2	08/28/2025 09:48	08/28/25 15:08	SM9222D Fecal Coliform by MF	00384
SWM 06-02	AWL-25-02596-004-3	08/28/2025 09:48	9/10/25 8:39	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 06-02	AWL-25-02596-004-4	08/28/2025 09:48	9/4/25 18:13	200.7	200.7 Ca, Mg ; pH<2
SWM 06-02	AWL-25-02596-004-4	08/28/2025 09:48	9/15/25 08:45	SM2340B	200.7 Ca, Mg ; pH<2
SWM 07-02	AWL-25-02596-005-1	08/28/2025 08:03	9/2/25 15:02	SM5210B BOD	
SWM 07-02	AWL-25-02596-005-1	08/28/2025 08:03	9/2/25 15:02	SM2540D	
SWM 07-02	AWL-25-02596-005-2	08/28/2025 08:03	08/28/25 15:08	SM9222D Fecal Coliform by MF	00383
SWM 07-02	AWL-25-02596-005-3	08/28/2025 08:03	9/10/25 8:42	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 07-02	AWL-25-02596-005-4	08/28/2025 08:03	9/4/25 18:17	200.7	200.7 Ca, Mg ; pH<2

SWM 07-02	AWL-25-02596-005-4	08/28/2025 08:03	9/15/25 08:46	SM2340B	200.7 Ca, Mg ; pH<2
SWM 07-02	AWL-25-02596-005-5	08/28/2025 08:03	9/5/25 18:41	625 PAH	EPA 625.1 PAH
SWM 07-02	AWL-25-02596-005-6	08/28/2025 08:03	9/5/25 12:36	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 07-02	AWL-25-02596-005-6	08/28/2025 08:03	9/16/2025 09:48	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 08-02	AWL-25-02596-006-1	08/28/2025 08:18	9/2/25 15:02	SM5210B BOD	
SWM 08-02	AWL-25-02596-006-1	08/28/2025 08:18	9/2/25 15:02	SM2540D	
SWM 08-02	AWL-25-02596-006-2	08/28/2025 08:18	08/28/25 15:08	SM9222D Fecal Coliform by MF	00381
SWM 08-02	AWL-25-02596-006-3	08/28/2025 08:18	9/10/25 8:46	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 08-02	AWL-25-02596-006-4	08/28/2025 08:18	9/4/25 18:21	200.7	200.7 Ca, Mg ; pH<2

SWM 08-02	AWL-25-02596-006-4	08/28/2025 08:18	9/15/25 08:48	SM2340B	200.7 Ca, Mg ; pH<2
SWM 08-02 Dup	AWL-25-02596-007-1	08/28/2025 08:28	9/2/25 15:02	SM2540D	
SWM 08-02 Dup	AWL-25-02596-007-1	08/28/2025 08:28	9/2/25 15:02	SM5210B BOD	
SWM 08-02 Dup	AWL-25-02596-007-2	08/28/2025 08:28	08/28/25 15:51	SM9222D Fecal Coliform by MF	00382
SWM 08-02 Dup	AWL-25-02596-007-3	08/28/2025 08:28	9/10/25 8:49	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 08-02 Dup	AWL-25-02596-007-4	08/28/2025 08:28	9/4/25 18:26	200.7	200.7 Ca, Mg ; pH<2
SWM 08-02 Dup	AWL-25-02596-007-4	08/28/2025 08:28	9/15/25 08:49	SM2340B	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-1	08/28/2025 09:20	9/2/25 15:02	SM5210B BOD	
SWM 09A-02	AWL-25-02596-008-1	08/28/2025 09:20	9/2/25 15:02	SM2540D	
SWM 09A-02	AWL-25-02596-008-2	08/28/2025 09:20	08/28/25 15:51	SM9222D Fecal Coliform by MF	00380
SWM 09A-02	AWL-25-02596-008-3	08/28/2025 09:20	9/10/25 8:53	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 09A-02	AWL-25-02596-008-4	08/28/2025 09:20	9/4/25 18:43	200.7	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-4	08/28/2025 09:20	9/15/25 08:50	SM2340B	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-5	08/28/2025 09:20	9/5/25 19:04	625 PAH	EPA 625.1 PAH

SWM 09A-02	AWL-25-02596-008-6	08/28/2025 09:20	9/5/25 12:57	624/624.1	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 09A-02	AWL-25-02596-008-6	08/28/2025 09:20	09/16/2025 09:51	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 10-02	AWL-25-02596-009-1	08/28/2025 08:58	9/2/25 15:02	SM2540D	
SWM 10-02	AWL-25-02596-009-1	08/28/2025 08:58	9/2/25 15:02	SM5210B BOD	
SWM 10-02	AWL-25-02596-009-2	08/28/2025 08:58	08/28/25 15:51	SM9222D Fecal Coliform by MF	00385
SWM 10-02	AWL-25-02596-009-3	08/28/2025 08:58	9/10/25 9:04	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 10-02	AWL-25-02596-009-4	08/28/2025 08:58	9/4/25 18:47	200.7	200.7 Ca, Mg ; pH<2
SWM 10-02	AWL-25-02596-009-4	08/28/2025 08:58	9/15/25 08:52	SM2340B	200.7 Ca, Mg ; pH<2
SWM 11-02	AWL-25-02596-010-1	08/28/2025 12:15	9/2/25 15:02	SM2540D	

SWM 11-02	AWL-25-02596-010-1	08/28/2025 12:15	9/2/25 15:02	SM5210B BOD	
SWM 11-02	AWL-25-02596-010-2	08/28/2025 12:15	08/28/25 15:51	SM9222D Fecal Coliform by MF	00386
SWM 11-02	AWL-25-02596-010-3	08/28/2025 12:15	9/10/25 9:07	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 11-02	AWL-25-02596-010-4	08/28/2025 12:15	9/4/25 18:52	200.7	200.7 Ca, Mg ; pH<2
SWM 11-02	AWL-25-02596-010-4	08/28/2025 12:15	9/15/25 08:53	SM2340B	200.7 Ca, Mg ; pH<2
SWM 12-02	AWL-25-02596-011-1	08/28/2025 10:50	9/2/25 15:02	SM5210B BOD	
SWM 12-02	AWL-25-02596-011-1	08/28/2025 10:50	9/2/25 15:02	SM2540D	
SWM 12-02	AWL-25-02596-011-2	08/28/2025 10:50	08/28/25 15:51	SM9222D Fecal Coliform by MF	00240; 243 x vol
SWM 12-02	AWL-25-02596-011-3	08/28/2025 10:50	9/11/25 9:23	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL. Primary, MS/ MSD - xvol sent
SWM 12-02	AWL-25-02596-011-4	08/28/2025 10:50	9/4/25 18:56	200.7	200.7 Ca, Mg ; pH<2 Primary/MS/ MSD - x vol sent
SWM 12-02	AWL-25-02596-011-4	08/28/2025 10:50	9/15/25 08:54	SM2340B	200.7 Ca, Mg ; pH<2 Primary/MS/ MSD - x vol sent
SWM 12-02	AWL-25-02596-011-5	08/28/2025 10:50	9/5/25 19:26	625 PAH	EPA 625.1 PAH Primary, MS/ MSD - xvol sent

SWM 12-02	AWL-25-02596-011-6	08/28/2025 10:50	9/8/25 8:18	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/ MSD - xvof sent
SWM 12-02	AWL-25-02596-011-6	08/28/2025 10:50	09/16/2025 09:53	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/ MSD - xvof sent
SWM 12-02 Dup	AWL-25-02596-012-1	08/28/2025 11:05	9/2/25 15:02	SM2540D	
SWM 12-02 Dup	AWL-25-02596-012-1	08/28/2025 11:05	9/2/25 15:02	SM5210B BOD	
SWM 12-02 Dup	AWL-25-02596-012-2	08/28/2025 11:05	08/28/25 15:51	SM9222D Fecal Coliform by MF	00246
SWM 12-02 Dup	AWL-25-02596-012-3	08/28/2025 11:05	9/10/25 11:58	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL.
SWM 12-02 Dup	AWL-25-02596-012-4	08/28/2025 11:05	9/4/25 19:18	200.7	200.7 Ca, Mg ; pH<2
SWM 12-02 Dup	AWL-25-02596-012-4	08/28/2025 11:05	9/15/25 08:55	SM2340B	200.7 Ca, Mg ; pH<2

SWM 12-02 Dup	AWL-25-02596-012-5	08/28/2025 11:05	9/5/25 20:32	625 PAH	EPA 625.1 PAH
SWM 12-02 Dup	AWL-25-02596-012-6	08/28/2025 11:05	9/8/25 8:39	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 12-02 Dup	AWL-25-02596-012-6	08/28/2025 11:05	09/16/2025 09:54	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM Trip Blank -02	AWL-25-02596-013-1	08/28/2025 08:03	9/8/25 6:31	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK

SWM Trip Blank -02	AWL-25-02596-013-1	08/28/2025 08:03	09/16/2025 09:55	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK
--------------------	--------------------	------------------	------------------	----------------------	---

**Analytical Methods**

Analyte	Analytical Method	Comments
BOD	SM5210B BOD	
Fecal Coliform	SM9222D Fecal Coliform by MF	
Ca, Mg	200.7	
Cu	200.8	
624 TAH	624 TAH	
625 PAH	625 PAH	
TAqH and TAH	Calculation	
Hardness	SM2340B Total Hardness	
TSS	SM2540D Total Suspended Solids	

Comments: Extra Volume goes to sublab for MS/MSD with SWM 12-01 sample for metals and 624/625 - AKS 8/29/25

Include lab QC in Report

Subcoc sent to EET Denver 8/29/25 - AKS

**Alaska Laboratory #AK01000**

**Definitions:**

DUP: Sample Duplicate  
LCS/LCSD: Laboratory Control Sample/Laboratory Control Sample Duplicate  
MRL: Method Reporting Limit  
MB: Method Blank  
MCL: Maximum Contaminant Limit  
MDL: Method Detection Limit  
MS/MSD: Matrix Spike/Matrix Spike Duplicate  
N/A: Not Applicable  
TNTC: Cell count is Too Numerous To Count  
<MDL: Result recovery is below the laboratory detectable limit, listed as the MDL.

**Data Qualifiers:**

B: The result of both the method blank and the target sample were recovered above the MDL.  
D: Sample was diluted prior to analysis.  
J: The reported result was recovered below the MRL (Method Reporting Limit), but above the MDL (Method Detection Limit), and should be considered an estimate.  
U: Result was recovered below the MDL, MRL, LOD, and LOQ.  
\*: The LCS/LCSD or DUP was recovered outside method specified control limits.  
H: Sample was received or analyzed outside of method specified holding time.  
E: Sample recovery is equal to or exceeded the MCL.  
Q: One or more Quality Control criteria was recovered outside of control limits.

**General Comments:**

1.0) Basis: "As Received" = Analyzed as received from client. "Dry" = dried prior to being analyzed. "Dry Weight Corrected" = analyzed as received, result corrected for percent moisture.

**Alaska Laboratory #AK01000**

**Analytical Results**

Client HDR Inc Project MOA Stormwater Monitoring - Sampling 2 2025

Contact Cindy Helmericks PWS # Non PWS

Project MOA Stormwater Monitoring - Sampling 2 2025

Sample Location: SWM 03-02 Collection Date/Time: 08/28/2025 11:33

AWL ID/ Fraction: AWL-25-02596-001-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	2.35	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	<MDL	mg/L	15.8	7.1		1.42	U	SM2540D	BKC	9/2/25 15:02

Comments: The result was less than the MDL. The result was 5.24 mg/L. Whole volume was used. BKC 9/4/25

Sample Location: SWM 03-02 Collection Date/Time: 08/28/2025 11:33

AWL ID/ Fraction: AWL-25-02596-001-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Anaylst Initials
Fecal Coliform	470.00	CFU/100mL	10.00			10.00	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-3 Matrix WW Sub Lab ID: 280-212807-1

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.4	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:28

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-4 Matrix WW Sub Lab ID: 280-212807-1

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	18000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:00
Magnesium	6600	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:00

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	72.12	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:40

Comments:

Sample Location: SWM 04-02

Collection Date/Time: 08/28/2025 11:43

AWL ID/ Fraction: AWL-25-02596-002-1

Matrix WW

Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	5.34	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-1

Matrix WW

Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	9.19	mg/L	16.47	7.4		1.48	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 04-02

Collection Date/Time: 08/28/2025 11:43

AWL ID/ Fraction: AWL-25-02596-002-2

Matrix WW

Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	DF	Flags	Method	Date/Time	Analyst Initials
Fecal Coliform	3800.00	CFU/100mL	100.00		100.00		SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-3

Matrix WW

Sub Lab ID: 280-212807-2

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.9	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:31

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-4

Matrix WW

Sub Lab ID: 280-212807-2

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	23000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:04
Magnesium	6100	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:04

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-4

Matrix WW

Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	82.55	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:41

Comments:

Sample Location: SWM 05-02

Collection Date/Time: 08/28/2025 10:25

AWL ID/ Fraction: AWL-25-02596-003-1

Matrix WW

Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	6.00	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	14.08	mg/L	20.36	9.15		1.83	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 05-02 Collection Date/Time: 08/28/2025 10:25

AWL ID/ Fraction: AWL-25-02596-003-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	5500.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-3 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.9	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:35

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-4 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	17000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:08
Magnesium	2600	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:08

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	53.16	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:43

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-5 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Acenaphthylene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Anthracene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[a]anthracene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[b]fluoranthene	ND	ug/L	4.3	2.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[k]fluoranthene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[a]pyrene	ND	ug/L	4.3	2.1		1		625.1	Eurofins Denver	9/5/25 18:19
Chrysene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Dibenz(a,h)anthracene	ND	ug/L	11	4.3		1		625.1	Eurofins Denver	9/5/25 18:19

Fluoranthene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Fluorene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Indeno[1,2,3-cd]pyrene	ND	ug/L	11	4.3	1	625.1	Eurofins Denver	9/5/25 18:19
Naphthalene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Phenanthrene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Pyrene	ND	ug/L	11	4.3	1	625.1	Eurofins Denver	9/5/25 18:19
Benzo[g,h,i]perylene	ND	ug/L	4.3	2.1	1	625.1	Eurofins Denver	9/5/25 18:19

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-6 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:16
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	9/16/2025 09:47
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	9/16/2025 09:47

Comments:

Sample Location: SWM 06-02 Collection Date/Time: 08/28/2025 09:48

AWL ID/ Fraction: AWL-25-02596-004-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	4.15	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	25.68	mg/L	16.91	7.6		1.52		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 06-02 Collection Date/Time: 08/28/2025 09:48

AWL ID/ Fraction: AWL-25-02596-004-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	781.82	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-3 Matrix WW Sub Lab ID: 280-212807-4

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.7	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:39

Comments:

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-4 Matrix WW Sub Lab ID: 280-212807-4

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	6900	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:13
Magnesium	1700	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:13

Comments:

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	24.23	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:45

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03

AWL ID/ Fraction: AWL-25-02596-005-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	5.89	mg/L	3	0.9			3	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-005-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	69.20	mg/L	44.51	20		4		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03

AWL ID/ Fraction: AWL-25-02596-005-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	1909.09	CFU/100mL	90.91			90.91	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-005-3 Matrix WW Sub Lab ID: 280-212807-5

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.3	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:42

Comments:

Sample Location:	SWM 07-02		SPID:	Collection Date/Time: 08/28/2025 08:03						
			FCID:							
AWL ID/ Fraction:	AWL-25-02596-005-4		Matrix	WW	Sub Lab ID: 280-212807-5					
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	3400	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:17
Magnesium	1300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:17

Comments:

Sample Location:	SWM 07-02		SPID:	Collection Date/Time: 08/28/2025 08:03						
			FCID:							
AWL ID/ Fraction:	AWL-25-02596-005-4		Matrix	WW	Batch ID:		091525-01-Hardness			
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	13.84	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:46

Comments:

Sample Location:	SWM 07-02		SPID:	Collection Date/Time: 08/28/2025 08:03						
			FCID:							
AWL ID/ Fraction:	AWL-25-02596-005-5		Matrix	WW	Sub Lab ID: 280-212807-5					
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Acenaphthylene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[a]anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[b]fluoranthene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[k]fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[a]pyrene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41
Chrysene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Dibenz(a,h)anthracene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Fluorene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Indeno[1,2,3-cd]pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Naphthalene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Phenanthrene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[g,h,i]perylene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41

Comments:

Sample Location:	SWM 07-02		SPID:	Collection Date/Time: 08/28/2025 08:03						
			FCID:							
AWL ID/ Fraction:	AWL-25-02596-005-6		Matrix	WW	Sub Lab ID:		280-212807-5			
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:36
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-005-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	9/16/2025 09:48
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	9/16/2025 09:48

Comments:

Sample Location: SWM 08-02 Collection Date/Time: 08/28/2025 08:18

AWL ID/ Fraction: AWL-25-02596-006-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	6.25	mg/L	3	0.9		3		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	33.00	mg/L	27.82	12.5		2.5		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 08-02 Collection Date/Time: 08/28/2025 08:18

AWL ID/ Fraction: AWL-25-02596-006-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	DF	Flags	Method	Date/Time	Analyst Initials
Fecal Coliform	11300.00	CFU/100mL	100.00		100.00		SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-3 Matrix WW Sub Lab ID: 280-212807-6

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.6	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:46

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-4 Matrix WW Sub Lab ID: 280-212807-6

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	4200	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:21
Magnesium	970	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:21

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	14.48	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:48

Comments:

Sample Location: SWM 08-02 Dup Collection Date/Time: 08/28/2025 08:28

AWL ID/ Fraction: AWL-25-02596-007-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	5.08	mg/L	3	0.9			3	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	27.00	mg/L	22.25	10			2	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 08-02 Dup Collection Date/Time: 08/28/2025 08:28

AWL ID/ Fraction: AWL-25-02596-007-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	>20000	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-3 Matrix WW Sub Lab ID: 280-212807-7

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.7	ug/L	2	1			1	J	200.8 Eurofins Denver	9/10/25 8:49

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-4 Matrix WW Sub Lab ID: 280-212807-7

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	4800	ug/L	200	60			1	200.7 Rev 4.4	Eurofins Denver	9/4/25 18:26
Magnesium	990	ug/L	200	50			1	200.7 Rev 4.4	Eurofins Denver	9/4/25 18:26

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	16.06	mg/L CaCO3	0.03	0.01			1	SM2340B Hardness	BKC	9/15/25 08:49

Comments:

Sample Location: SWM 09A-02 Collection Date/Time: 08/28/2025 09:20

AWL ID/ Fraction: AWL-25-02596-008-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	4.99	mg/L	4	1.2			4	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	26.00	mg/L	17.14	7.7		1.54		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 09A-02 Collection Date/Time: 08/28/2025 09:20

AWL ID/ Fraction: AWL-25-02596-008-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	4800.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-3 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.4	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:53

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-4 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	21000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:43
Magnesium	3400	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:43

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	66.44	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:50

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-5 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Acenaphthylene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Anthracene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[a]anthracene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[b]fluoranthene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[k]fluoranthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[a]pyrene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	9/5/25 19:04
Chrysene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Dibenz(a,h)anthracene	ND	ug/L	9.4	3.8		1		625.1	Eurofins Denver	9/5/25 19:04
Fluoranthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Fluorene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.4	3.8		1		625.1	Eurofins Denver	9/5/25 19:04
Naphthalene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04

Phenanthrene	ND	ug/L	3.8	0.94	1	625.1	Eurofins Denver	9/5/25 19:04
Pyrene	ND	ug/L	9.4	3.8	1	625.1	Eurofins Denver	9/5/25 19:04
Benzo[g,h,i]perylene	ND	ug/L	3.8	1.9	1	625.1	Eurofins Denver	9/5/25 19:04

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-6 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:57
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:51
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:51

Comments:

Sample Location: SWM 10-02 Collection Date/Time: 08/28/2025 08:58

AWL ID/ Fraction: AWL-25-02596-009-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	2.02	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 10-02 SPID: Collection Date/Time: 08/28/2025 08:58

FCID:

AWL ID/ Fraction: AWL-25-02596-009-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	<MDL	mg/L	17.58	7.9		1.58	U	SM2540D	BKC	9/2/25 15:02

Comments: The result was less than the MDL. The result was 7.74 mg/L. Whole volume was used. BKC 9/4/25

Sample Location: SWM 10-02 Collection Date/Time: 08/28/2025 08:58

AWL ID/ Fraction: AWL-25-02596-009-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	31000.00	CFU/100mL	1000.00			1000.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 10-02 SPID: Collection Date/Time: 08/28/2025 08:58

FCID:

AWL ID/ Fraction: AWL-25-02596-009-3 Matrix WW Sub Lab ID: 280-212807-9

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.9	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 9:04

Comments:

Sample Location:	SWM 10-02	SPID:		Collection Date/Time:	08/28/2025 08:58
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-009-4	Matrix	WW	Sub Lab ID:	280-212807-9

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	22000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:47
Magnesium	5800	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:47

Comments:

Sample Location:	SWM 10-02	SPID:		Collection Date/Time:	08/28/2025 08:58
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-009-4	Matrix	WW	Batch ID:	091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	78.82	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:52

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-1	Matrix	WW	Batch ID:	082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	4.00	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-1	Matrix	WW	Batch ID:	090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	65.60	mg/L	22.25	10		2		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-2	Matrix	WW	Batch ID:	082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	1563.64	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-3	Matrix	WW	Sub Lab ID:	280-212807-10

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.5	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 9:07

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-4	Matrix	WW	Sub Lab ID:	280-212807-10

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
---------	--------	-------	-----	-----	-----	----	-------	--------	---------	--------------------



Total Hardness	85.87	mg/L CaCO3	0.03	0.01	1	SM2340B Hardness	BKC	9/15/25 08:54
----------------	-------	------------	------	------	---	------------------	-----	---------------

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-5 Matrix WW Sub Lab ID: 280-212807-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Acenaphthylene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[a]anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[b]fluoranthene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[k]fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[a]pyrene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26
Chrysene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Dibenz(a,h)anthracene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Fluorene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Indeno[1,2,3-cd]pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Naphthalene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Phenanthrene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[g,h,i]perylene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-6 Matrix WW Sub Lab ID: 280-212807-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 8:18
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:53
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:53

Comments:

Sample Location: SWM 12-02 Dup Collection Date/Time: 08/28/2025 11:05

AWL ID/ Fraction: AWL-25-02596-012-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	5.08	mg/L	2	0.6			2	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	20.75	mg/L	27.82	12.5		2.5	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 12-02 Dup Collection Date/Time: 08/28/2025 11:05

AWL ID/ Fraction: AWL-25-02596-012-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	15363.64	CFU/100mL	90.91			90.91	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-3 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.4	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 11:58

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-4 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	24000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 19:18
Magnesium	6300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 19:18

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-4 Matrix WW Batch ID: 091525-02-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	85.87	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:55

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-5 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Acenaphthylene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Anthracene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[a]anthracene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[b]fluoranthene	ND	ug/L	3.9	2		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[k]fluoranthene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[a]pyrene	ND	ug/L	3.9	2		1		625.1	Eurofins Denver	9/5/25 20:32

Chrysene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Dibenz(a,h)anthracene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Fluoranthene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Fluorene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Naphthalene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Phenanthrene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Pyrene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Benzo[g,h,i]perylene	ND	ug/L	3.9	2	1	625.1	Eurofins Denver	9/5/25 20:32

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-6 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 8:39
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:54
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:54

Comments:

Sample Location: SWM Trip Blank -02 SPID: Collection Date/Time: 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-013-1 Matrix AQ Sub Lab ID: 280-212807-13

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 6:31
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31

Comments:

Sample Location: SWM Trip Blank -02 SPID: Collection Date/Time 08/28/2025 08:03

AWL ID/ Fraction:		AWL-25-02596-013-1		FCID:				Batch ID:		091625-01-TAqH	
Matrix		AQ		MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)		<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:55
Total Aromatic Hydrocarbons (TAH)		NA	ug/L	1	1		1		Calculation	NA	NA

Comments:

**Alaska Laboratory #AK01000**

**Analysis QC**

**BOD SM 5210B**

**Batch ID 082925-01-BOD**

**Method Blank**

Analyte	MB	Flags	MDL	MRL	CRDL	Analyst	Date/Time
BOD	0.12		0.3	0.9		SMK	08/29/25 14:55

**LCS**

Analyte	LCS	Flags	Spike Amount	Percent Recovery	Limits	Analyst	Date/Time
BOD	197.25		210.8	93.57	85-115	SMK	08/29/25 14:55

**Sample Duplicate**

**Parent ID**

AWL-25-02596-011-1

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
BOD	5.41		6.37	16.3	≤30	SMK	08/29/25 14:55

**Total Suspended Solids SM2540D**

**Batch ID: 090225-01-TSS**

**Method Blank**

Analyte	MB	Flags	MDL	MRL	CRDL	Analyst	Date/Time
Total Suspended Solids	-0.10		5.00	11.13		BKC	9/2/25 15:02

**LCS**

Analyte	LCS	Flags	Spike amount	Percent Recovery	Limits	Analyst	Date/Time
Total Suspended Solids	44.00		47.40	92.83	90-110	BKC	9/2/25 15:02

**Sample Duplicate**

**Parent ID:**

AWL-25-02593-001

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
Total Suspended Solids	20.40		18.00	12.5	≤20	BKC	9/2/25 15:02

**Sample Duplicate 2**

**Parent ID:**

N/A

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
Total Suspended Solids	N/A		N/A	#VALUE!	≤20	N/A	N/A

**AWL Chain of Custody**

Custody form MUST be signed  
Please provide as much information as possible



AWL-25- 02596

<b>Client/Company Name &amp; Address:</b> HDR Inc. 582 E. 36th Ave. Suite 500 Anchorage, AK 99503-4169		<b>Public Water System (PWS) ID:</b> Non PWS <b>Project Name/ID:</b> Storm Event #2		<b>Quote Number:</b> AWL #		<b>Account #:</b> Check Credit	
<b>Contact Person:</b> Cindy Helmericks Phone No: 907.644.2017 (o)   907.231.9305 (c) Fax No: ---		<b>Turnaround Time (TAT) for Results:</b> X Standard Expedited *Specify Requested Due Date if not standard		<b>Invoice Contact Name &amp; Address &amp; Phone:</b> HDR Inc. ATTN: Calley Hall 582 E. 36th Ave. Suite 500, Anchorage, AK 99503-4169 calley.hall@hdrinc.com 907-644-2123		<b>PO/Contract No.:</b> 10427839, Task 1-0	
<b>E-mail:</b> Cynthia.Helmericks@hdrinc.com		<b>Requested Date for Results:</b> Results to STATE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		<b>Requested Analysis/Method</b>		<b>Comments</b>	
<b>Special Instructions/Requirements:</b>		Routine Non-Routine Specify if REPEAT sample		EPA 200.8/2340B - Total Hardness: HNO3 EPA 625 SIM - TAqH EPA 624 - TAH Preservative: HCl		Field Dup	
<b>Kit Preparation/Shipping Charge:</b>		5210B - BOD 2540D - Total Suspended Solids 9222D - Fecal Coliform Preserv.: Na2S04		200.8 - Dissolved Cu (Lab Filter) EPA 200.8/2340B - Total Hardness: HNO3 EPA 625 SIM - TAqH EPA 624 - TAH Preservative: HCl		Section To Be Completed by AWL	
<b>Client Sample Identification</b> (Name, Designation, Location, etc.)		Date Sampled Time Sampled Matrix (DW, WW, SO) No. of Containers		Custody Seal (circle): Intact Broken		Thermo ID Recv Notes:	
* SWM 03-02 * SWM 04-02 * SWM 05-02 * SWM 06-02 * SWM 07-02 * SWM 08-02 * SWM 08-02 Dup * SWM 09A-02 * SWM 10-02 * SWM 11-02		8/28/25 11:33 8/28/25 11:43 8/28/25 16:25 8/28/25 09:48 8/28/25 08:18 8/28/25 08:28 8/28/25 09:20 8/28/25 08:58 8/28/25 12:15		4 WS 4 WS 8 WS 4 WS 8 WS 4 WS 4 WS 8 WS 4 WS 4 WS		136A No VOA Bubbles call Handness pH < 2 o/cu Filtered & preserved @ 4°C	
Relinquished by: Margaret Zhu Date: 8/28/25 Time: 13:47		Received by: MOC Date: 8-28-25 Time: 13:47		Temperature on arrival: See Below °C Temp: 7.4 Cooler Ice: Frozen		Delivery Method (Circle): Courier USPS/Mail Hand	
Name of Sampler: (printed) Margaret Zhu / Chris Keil		Time:		Name of Sampler: (printed) Margaret Zhu / Chris Keil		Name of Sampler: (printed) Margaret Zhu / Chris Keil	

AWL-25- 02596

Storm Event #2

Non PWS

Turnaround Time (TAT) for Results: Standard

Requested Date for Results: Results to STATE: Yes No

Special Instructions/Requirements:

Kit Preparation/Shipping Charge:

Client Sample Identification (Name, Designation, Location, etc.):

\* SWM 03-02  
\* SWM 04-02  
\* SWM 05-02  
\* SWM 06-02  
\* SWM 07-02  
\* SWM 08-02  
\* SWM 08-02 Dup  
\* SWM 09A-02  
\* SWM 10-02  
\* SWM 11-02

Relinquished by: Margaret Zhu  
Date: 8/28/25  
Time: 13:47

Received by: MOC  
Date: 8-28-25  
Time: 13:47

Temperature on arrival: See Below °C  
Temp: 7.4  
Cooler  
Ice: Frozen

Delivery Method (Circle): Courier USPS/Mail Hand

Name of Sampler: (printed) Margaret Zhu / Chris Keil

Name of Sampler: (printed) Margaret Zhu / Chris Keil

Name of Sampler: (printed) Margaret Zhu / Chris Keil

AWL-25- 02596

**AWL Chain of Custody**  
Custody form **MUST** be signed  
Please provide as much information as possible



Alaska Water Laboratories  
281 N Main st, Suite # 101  
Wasilla, AK 99654  
907-373-6130

AWL-AS-00210

Client/Company Name & Address: HDR Inc. 582 E. 36th Ave. Suite 500 Anchorage, AK 99503-4169		Public Water System (PWS) ID: Project Name/ID:	
Contact Person: Cindy Helmericks Phone No: 907.644.2017 (o)   907.231.9305 (c) Fax No: ---		Turnaround Time (TAT) for Results <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Expedited (prior authorization required) *Specify Requested Due Date if not standard	
E-mail: Cynthia.Helmericks@hdrinc.com		Requested Date for Results: Results to STATE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Special Instructions/Requirements:		Routine Non-Routine Specify if REPEAT sample	
Quote Number		AWL Staff	
Account #:		AWL #	
Invoice Contact Name & Address & Phone: HDR Inc. ATTN: Calley Hall 582 E. 36th Ave. Suite 500, Anchorage, AK 99503-4169 calley.hall@hdrinc.com 907-644-2123		Check Credit	
PO/Contract No.: 10427839, Task 1.0			

Kit Preparation/Shipping Charge:	Client Sample Identification (Name, Designation, Location, etc.)	Date Sampled	Time Sampled	Matrix (DW, WW, SO)	No. of Containers	Requested Analysis/Method		Comments
						5210B - BOD	2540D - Total Suspended Solids	
15 WMM 12-02		8/28/25	10:50	WS	19	9222D - Fecal Coliform Preserv.: Na2SO4	Hardness EPA 200.8/2340B - Total Preservative: HNO3	Prim. MS/MSD
16 WMM 12-02 DUP		8/28/25	11:05	WS	8	200.8 - Dissolved Cu (Lab Filter)	EPA 625 SIM - TAqH Preservative: HCl	Field dup
17 WMM TripBlank-02		8/28/25	08:05	WS	2			Trip Blanks (2)
18								
19								
20								

Relinquished by:		Date	Time	Received by:	Date	Time
Relinquished by:		Date	Time	Received by:	Date	Time
Relinquished by:		Date	Time	Received by:	Date	Time
Name of Sampler: (printed)		Temperature on arrival: °C		Custody Seal (circle): Intact Broken Absent		Thermo ID
		Temp TB Cooler		Temp TB Cooler		Recv Notes:
		Ice Frozen Wet		Ice Frozen Wet		Delivery Method (Circle) Courier USPS/Mail Hand

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Mary Curry  
Alaska Water Laboratories  
281 North Main Street  
Suite 101  
Wasilla, Alaska 99654

Generated 9/12/2025 11:35:07 AM

## JOB DESCRIPTION

AWL-25-02596

## JOB NUMBER

280-212807-1

# Eurofins Denver

## 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 TestAmerica Project Manager.

## Authorization



Generated  
9/12/2025 11:35:07 AM

Authorized for release by  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Method Summary . . . . .	8
Sample Summary . . . . .	9
Client Sample Results . . . . .	10
Surrogate Summary . . . . .	19
QC Sample Results . . . . .	20
QC Association . . . . .	27
Chronicle . . . . .	30
Certification Summary . . . . .	34
Chain of Custody . . . . .	35
Receipt Checklists . . . . .	38

# Definitions/Glossary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Case Narrative

Client: Alaska Water Laboratories  
Project: AWL-25-02596

Job ID: 280-212807-1

**Job ID: 280-212807-1**

**Eurofins Denver**

## Job Narrative 280-212807-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 9/3/2025 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

### Method 624.1 - Volatile Organic Compounds (GC/MS)

Samples AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5), AWL-25-02596-008 (280-212807-8), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD), AWL-25-02596-012 (280-212807-12) and AWL-25-02596-013 (280-212807-13) were analyzed for Volatile Organic Compounds (GC/MS). The samples were analyzed on 9/5/2025 and 9/8/2025.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-712089. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. The associated samples are: AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5) and AWL-25-02596-008 (280-212807-8).

### Method 625.1 - Semivolatile Organic Compounds (GC/MS)

Samples AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5), AWL-25-02596-008 (280-212807-8), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Semivolatile Organic Compounds (GC/MS). The samples were prepared on 9/4/2025 and analyzed on 9/5/2025.

### Method 200.7 Rev 4.4 - Metals (ICP)

Samples AWL-25-02596-001 (280-212807-1), AWL-25-02596-002 (280-212807-2), AWL-25-02596-003 (280-212807-3), AWL-25-02596-004 (280-212807-4), AWL-25-02596-005 (280-212807-5), AWL-25-02596-006 (280-212807-6), AWL-25-02596-007 (280-212807-7), AWL-25-02596-008 (280-212807-8), AWL-25-02596-009 (280-212807-9), AWL-25-02596-010 (280-212807-10), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Metals (ICP). The samples were prepared on 9/3/2025 and analyzed on 9/4/2025.

### Method 200.8 - Metals (ICP/MS) - Dissolved

Samples AWL-25-02596-001 (280-212807-1), AWL-25-02596-002 (280-212807-2), AWL-25-02596-003 (280-212807-3), AWL-25-02596-004 (280-212807-4), AWL-25-02596-005 (280-212807-5), AWL-25-02596-006 (280-212807-6), AWL-25-02596-007 (280-212807-7), AWL-25-02596-008 (280-212807-8), AWL-25-02596-009 (280-212807-9), AWL-25-02596-010 (280-212807-10), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 9/3/2025 and analyzed on 9/10/2025 and 9/11/2025.

Eurofins Denver

# Detection Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Client Sample ID: AWL-25-02596-001

## Lab Sample ID: 280-212807-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	18000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6600		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.4	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-002

## Lab Sample ID: 280-212807-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	23000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6100		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.9		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-003

## Lab Sample ID: 280-212807-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	17000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2600		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.9		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-004

## Lab Sample ID: 280-212807-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6900		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1700		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.7	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-005

## Lab Sample ID: 280-212807-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	3400		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.3		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-006

## Lab Sample ID: 280-212807-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	4200		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	970		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.6	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-007

## Lab Sample ID: 280-212807-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	4800		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	990		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.7	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-008

## Lab Sample ID: 280-212807-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	21000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	3400		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.4	J	2.0	1.0	ug/L	1		200.8	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

# Detection Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Client Sample ID: AWL-25-02596-009

## Lab Sample ID: 280-212807-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	22000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	5800		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.9	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-010

## Lab Sample ID: 280-212807-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	17000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2200		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.5		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-011

## Lab Sample ID: 280-212807-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	24000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.4		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-012

## Lab Sample ID: 280-212807-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	24000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.4		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-013

## Lab Sample ID: 280-212807-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Denver

# Method Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET DEN
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
625	Liquid-Liquid Extraction	EPA	EET DEN

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
280-212807-1	AWL-25-02596-001	Water	08/28/25 11:33	09/03/25 09:55	Alaska
280-212807-2	AWL-25-02596-002	Water	08/28/25 11:43	09/03/25 09:55	Alaska
280-212807-3	AWL-25-02596-003	Water	08/28/25 10:25	09/03/25 09:55	Alaska
280-212807-4	AWL-25-02596-004	Water	08/28/25 09:48	09/03/25 09:55	Alaska
280-212807-5	AWL-25-02596-005	Water	08/28/25 08:03	09/03/25 09:55	Alaska
280-212807-6	AWL-25-02596-006	Water	08/28/25 08:18	09/03/25 09:55	Alaska
280-212807-7	AWL-25-02596-007	Water	08/28/25 08:28	09/03/25 09:55	Alaska
280-212807-8	AWL-25-02596-008	Water	08/28/25 09:20	09/03/25 09:55	Alaska
280-212807-9	AWL-25-02596-009	Water	08/28/25 08:58	09/03/25 09:55	Alaska
280-212807-10	AWL-25-02596-010	Water	08/28/25 12:15	09/03/25 09:55	Alaska
280-212807-11	AWL-25-02596-011	Water	08/28/25 10:50	09/03/25 09:55	Alaska
280-212807-12	AWL-25-02596-012	Water	08/28/25 11:05	09/03/25 09:55	Alaska
280-212807-13	AWL-25-02596-013	Water	08/28/25 08:03	09/03/25 09:55	Alaska

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-003**

**Date Collected: 08/28/25 10:25**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100		73 - 122					09/05/25 12:16	1
Toluene-d8 (Surr)	97		80 - 120					09/05/25 12:16	1
4-Bromofluorobenzene (Surr)	99		79 - 119					09/05/25 12:16	1

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	101		73 - 122					09/05/25 12:36	1
Toluene-d8 (Surr)	98		80 - 120					09/05/25 12:36	1
4-Bromofluorobenzene (Surr)	100		79 - 119					09/05/25 12:36	1

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	104		73 - 122					09/05/25 12:57	1
Toluene-d8 (Surr)	97		80 - 120					09/05/25 12:57	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		79 - 119		09/05/25 12:57	1

**Client Sample ID: AWL-25-02596-011**

**Date Collected: 08/28/25 10:50**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		73 - 122		09/08/25 08:18	1
Toluene-d8 (Surr)	105		80 - 120		09/08/25 08:18	1
4-Bromofluorobenzene (Surr)	102		79 - 119		09/08/25 08:18	1

**Client Sample ID: AWL-25-02596-012**

**Date Collected: 08/28/25 11:05**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		73 - 122		09/08/25 08:39	1
Toluene-d8 (Surr)	106		80 - 120		09/08/25 08:39	1
4-Bromofluorobenzene (Surr)	102		79 - 119		09/08/25 08:39	1

**Client Sample ID: AWL-25-02596-013**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 06:31	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-013**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		73 - 122					09/08/25 06:31	1
Toluene-d8 (Surr)	106		80 - 120					09/08/25 06:31	1
4-Bromofluorobenzene (Surr)	104		79 - 119					09/08/25 06:31	1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-003**

**Date Collected: 08/28/25 10:25**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Acenaphthylene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Anthracene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[a]anthracene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[b]fluoranthene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[k]fluoranthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[a]pyrene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Chrysene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Dibenz(a,h)anthracene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Fluoranthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Fluorene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Indeno[1,2,3-cd]pyrene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Naphthalene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Phenanthrene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Pyrene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[g,h,i]perylene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		22 - 120				09/04/25 14:30	09/05/25 18:19	1
2-Fluorophenol	45		23 - 120				09/04/25 14:30	09/05/25 18:19	1
2,4,6-Tribromophenol	87		41 - 134				09/04/25 14:30	09/05/25 18:19	1
Nitrobenzene-d5	67		36 - 120				09/04/25 14:30	09/05/25 18:19	1
Phenol-d5	34		15 - 120				09/04/25 14:30	09/05/25 18:19	1
Terphenyl-d14	100		54 - 127				09/04/25 14:30	09/05/25 18:19	1

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	67		22 - 120				09/04/25 14:30	09/05/25 18:41	1
2-Fluorophenol	49		23 - 120				09/04/25 14:30	09/05/25 18:41	1
2,4,6-Tribromophenol	91		41 - 134				09/04/25 14:30	09/05/25 18:41	1
Nitrobenzene-d5	73		36 - 120				09/04/25 14:30	09/05/25 18:41	1
Phenol-d5	38		15 - 120				09/04/25 14:30	09/05/25 18:41	1
Terphenyl-d14	107		54 - 127				09/04/25 14:30	09/05/25 18:41	1

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Acenaphthylene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Anthracene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[a]anthracene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[b]fluoranthene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[k]fluoranthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[a]pyrene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
Chrysene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Dibenz(a,h)anthracene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Fluoranthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Fluorene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Indeno[1,2,3-cd]pyrene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Naphthalene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Phenanthrene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Pyrene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[g,h,i]perylene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		22 - 120				09/04/25 14:30	09/05/25 19:04	1
2-Fluorophenol	49		23 - 120				09/04/25 14:30	09/05/25 19:04	1
2,4,6-Tribromophenol	95		41 - 134				09/04/25 14:30	09/05/25 19:04	1
Nitrobenzene-d5	75		36 - 120				09/04/25 14:30	09/05/25 19:04	1
Phenol-d5	34		15 - 120				09/04/25 14:30	09/05/25 19:04	1
Terphenyl-d14	105		54 - 127				09/04/25 14:30	09/05/25 19:04	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-011**

**Date Collected: 08/28/25 10:50**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	66		22 - 120				09/04/25 14:30	09/05/25 19:26	1
2-Fluorophenol	48		23 - 120				09/04/25 14:30	09/05/25 19:26	1
2,4,6-Tribromophenol	94		41 - 134				09/04/25 14:30	09/05/25 19:26	1
Nitrobenzene-d5	73		36 - 120				09/04/25 14:30	09/05/25 19:26	1
Phenol-d5	35		15 - 120				09/04/25 14:30	09/05/25 19:26	1
Terphenyl-d14	96		54 - 127				09/04/25 14:30	09/05/25 19:26	1

**Client Sample ID: AWL-25-02596-012**

**Date Collected: 08/28/25 11:05**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Acenaphthylene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Anthracene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[a]anthracene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[b]fluoranthene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[k]fluoranthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[a]pyrene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Chrysene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Dibenz(a,h)anthracene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Fluoranthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Fluorene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Indeno[1,2,3-cd]pyrene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Naphthalene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Phenanthrene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Pyrene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[g,h,i]perylene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		22 - 120				09/04/25 14:30	09/05/25 20:32	1
2-Fluorophenol	48		23 - 120				09/04/25 14:30	09/05/25 20:32	1
2,4,6-Tribromophenol	93		41 - 134				09/04/25 14:30	09/05/25 20:32	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-012**  
**Date Collected: 08/28/25 11:05**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73		36 - 120	09/04/25 14:30	09/05/25 20:32	1
Phenol-d5	36		15 - 120	09/04/25 14:30	09/05/25 20:32	1
Terphenyl-d14	104		54 - 127	09/04/25 14:30	09/05/25 20:32	1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP)

**Client Sample ID: AWL-25-02596-001**  
**Date Collected: 08/28/25 11:33**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	18000		200	60	ug/L		09/03/25 18:24	09/04/25 18:00	1
Magnesium	6600		200	50	ug/L		09/03/25 18:24	09/04/25 18:00	1

**Client Sample ID: AWL-25-02596-002**  
**Date Collected: 08/28/25 11:43**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	23000		200	60	ug/L		09/03/25 18:24	09/04/25 18:04	1
Magnesium	6100		200	50	ug/L		09/03/25 18:24	09/04/25 18:04	1

**Client Sample ID: AWL-25-02596-003**  
**Date Collected: 08/28/25 10:25**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	17000		200	60	ug/L		09/03/25 18:24	09/04/25 18:08	1
Magnesium	2600		200	50	ug/L		09/03/25 18:24	09/04/25 18:08	1

**Client Sample ID: AWL-25-02596-004**  
**Date Collected: 08/28/25 09:48**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6900		200	60	ug/L		09/03/25 18:24	09/04/25 18:13	1
Magnesium	1700		200	50	ug/L		09/03/25 18:24	09/04/25 18:13	1

**Client Sample ID: AWL-25-02596-005**  
**Date Collected: 08/28/25 08:03**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	3400		200	60	ug/L		09/03/25 18:24	09/04/25 18:17	1
Magnesium	1300		200	50	ug/L		09/03/25 18:24	09/04/25 18:17	1

**Client Sample ID: AWL-25-02596-006**  
**Date Collected: 08/28/25 08:18**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4200		200	60	ug/L		09/03/25 18:24	09/04/25 18:21	1
Magnesium	970		200	50	ug/L		09/03/25 18:24	09/04/25 18:21	1

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP)

**Client Sample ID: AWL-25-02596-007**

**Date Collected: 08/28/25 08:28**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-7**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4800		200	60	ug/L		09/03/25 18:24	09/04/25 18:26	1
Magnesium	990		200	50	ug/L		09/03/25 18:24	09/04/25 18:26	1

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	21000		200	60	ug/L		09/03/25 18:24	09/04/25 18:43	1
Magnesium	3400		200	50	ug/L		09/03/25 18:24	09/04/25 18:43	1

**Client Sample ID: AWL-25-02596-009**

**Date Collected: 08/28/25 08:58**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-9**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	22000		200	60	ug/L		09/03/25 18:24	09/04/25 18:47	1
Magnesium	5800		200	50	ug/L		09/03/25 18:24	09/04/25 18:47	1

**Client Sample ID: AWL-25-02596-010**

**Date Collected: 08/28/25 12:15**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-10**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	17000		200	60	ug/L		09/03/25 18:24	09/04/25 18:52	1
Magnesium	2200		200	50	ug/L		09/03/25 18:24	09/04/25 18:52	1

**Client Sample ID: AWL-25-02596-011**

**Date Collected: 08/28/25 10:50**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24000		200	60	ug/L		09/03/25 18:24	09/04/25 18:56	1
Magnesium	6300		200	50	ug/L		09/03/25 18:24	09/04/25 18:56	1

**Client Sample ID: AWL-25-02596-012**

**Date Collected: 08/28/25 11:05**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24000		200	60	ug/L		09/03/25 18:24	09/04/25 19:18	1
Magnesium	6300		200	50	ug/L		09/03/25 18:24	09/04/25 19:18	1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

**Client Sample ID: AWL-25-02596-001**

**Date Collected: 08/28/25 11:33**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-1**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.4	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:28	1

**Client Sample ID: AWL-25-02596-002**

**Date Collected: 08/28/25 11:43**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-2**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.9		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:31	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02596-003

Date Collected: 08/28/25 10:25

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.9		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:35	1

Client Sample ID: AWL-25-02596-004

Date Collected: 08/28/25 09:48

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.7	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:39	1

Client Sample ID: AWL-25-02596-005

Date Collected: 08/28/25 08:03

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.3		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:42	1

Client Sample ID: AWL-25-02596-006

Date Collected: 08/28/25 08:18

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.6	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:46	1

Client Sample ID: AWL-25-02596-007

Date Collected: 08/28/25 08:28

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.7	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:49	1

Client Sample ID: AWL-25-02596-008

Date Collected: 08/28/25 09:20

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.4	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:53	1

Client Sample ID: AWL-25-02596-009

Date Collected: 08/28/25 08:58

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.9	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 09:04	1

Client Sample ID: AWL-25-02596-010

Date Collected: 08/28/25 12:15

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.5		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 09:07	1

Client Sample ID: AWL-25-02596-011

Date Collected: 08/28/25 10:50

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.4		2.0	1.0	ug/L		09/03/25 16:44	09/11/25 09:23	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02596-012

Date Collected: 08/28/25 11:05

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.4		2.0	1.0	ug/L		09/03/25 16:45	09/10/25 11:58	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Surrogate Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DCA (73-122)	TOL (80-120)	BFB (79-119)
280-212807-3	AWL-25-02596-003	100	97	99
280-212807-5	AWL-25-02596-005	101	98	100
280-212807-8	AWL-25-02596-008	104	97	101
280-212807-11	AWL-25-02596-011	99	105	102
280-212807-11 MS	AWL-25-02596-011	101	102	101
280-212807-11 MSD	AWL-25-02596-011	101	105	102
280-212807-12	AWL-25-02596-012	101	106	102
280-212807-13	AWL-25-02596-013	100	106	104
LCS 280-712089/4	Lab Control Sample	103	100	100
LCS 280-712325/4	Lab Control Sample	101	102	99
LCSD 280-712089/5	Lab Control Sample Dup	101	99	99
LCSD 280-712325/5	Lab Control Sample Dup	101	103	102
MB 280-712089/9	Method Blank	99	99	99
MB 280-712325/9	Method Blank	102	106	102

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (22-120)	2FP (23-120)	TBP (41-134)	NBZ (36-120)	PHL (15-120)	TPHL (54-127)
280-212807-3	AWL-25-02596-003	63	45	87	67	34	100
280-212807-5	AWL-25-02596-005	67	49	91	73	38	107
280-212807-8	AWL-25-02596-008	69	49	95	75	34	105
280-212807-11	AWL-25-02596-011	66	48	94	73	35	96
280-212807-11 MS	AWL-25-02596-011	65	41	87	66	32	96
280-212807-11 MSD	AWL-25-02596-011	65	42	90	65	33	98
280-212807-12	AWL-25-02596-012	63	48	93	73	36	104
LCS 280-712008/2-A	Lab Control Sample	90	61	99	95	44	100
MB 280-712008/1-A	Method Blank	79	53	81	89	37	100

#### Surrogate Legend

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

TBP = 2,4,6-Tribromophenol

NBZ = Nitrobenzene-d5

PHL = Phenol-d5

TPHL = Terphenyl-d14

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-712089/9**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		73 - 122		09/05/25 09:32	1
Toluene-d8 (Surr)	99		80 - 120		09/05/25 09:32	1
4-Bromofluorobenzene (Surr)	99		79 - 119		09/05/25 09:32	1

**Lab Sample ID: LCS 280-712089/4**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	65 - 135
1,3-Dichlorobenzene	50.0	46.5		ug/L		93	70 - 130
1,4-Dichlorobenzene	50.0	45.8		ug/L		92	65 - 135
Benzene	50.0	51.6		ug/L		103	65 - 135
Ethylbenzene	50.0	50.2		ug/L		100	60 - 140
Toluene	50.0	50.9		ug/L		102	70 - 130
Total BTEX	250	253		ug/L		101	80 - 120
Xylenes, Total	100	101		ug/L		101	80 - 120
Chlorobenzene	50.0	50.0		ug/L		100	65 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		73 - 122
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		79 - 119

**Lab Sample ID: LCSD 280-712089/5**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
1,2-Dichlorobenzene	50.0	46.2		ug/L		92	65 - 135	0	30
1,3-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 130	0	30
1,4-Dichlorobenzene	50.0	45.6		ug/L		91	65 - 135	0	30
Benzene	50.0	52.0		ug/L		104	65 - 135	1	30
Ethylbenzene	50.0	49.0		ug/L		98	60 - 140	2	30
Toluene	50.0	50.8		ug/L		102	70 - 130	0	30
Total BTEX	250	251		ug/L		100	80 - 120	1	30
Xylenes, Total	100	98.7		ug/L		99	80 - 120	2	30

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 280-712089/5**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	50.0	49.1		ug/L		98	65 - 135	2	30
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	101		73 - 122						
Toluene-d8 (Surr)	99		80 - 120						
4-Bromofluorobenzene (Surr)	99		79 - 119						

**Lab Sample ID: MB 280-712325/9**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	102		73 - 122				09/08/25 06:05	1	
Toluene-d8 (Surr)	106		80 - 120				09/08/25 06:05	1	
4-Bromofluorobenzene (Surr)	102		79 - 119				09/08/25 06:05	1	

**Lab Sample ID: LCS 280-712325/4**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	65 - 135
1,3-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 130
1,4-Dichlorobenzene	50.0	51.0		ug/L		102	65 - 135
Benzene	50.0	53.2		ug/L		106	65 - 135
Ethylbenzene	50.0	51.1		ug/L		102	60 - 140
Toluene	50.0	51.0		ug/L		102	70 - 130
Total BTEX	250	257		ug/L		103	80 - 120
Xylenes, Total	100	102		ug/L		102	80 - 120
Chlorobenzene	50.0	49.8		ug/L		100	65 - 135
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	101		73 - 122				
Toluene-d8 (Surr)	102		80 - 120				
4-Bromofluorobenzene (Surr)	99		79 - 119				

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 280-712325/5**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	51.2		ug/L		102	65 - 135	6	30
1,3-Dichlorobenzene	50.0	51.1		ug/L		102	70 - 130	7	30
1,4-Dichlorobenzene	50.0	53.7		ug/L		107	65 - 135	5	30
Benzene	50.0	52.8		ug/L		106	65 - 135	1	30
Ethylbenzene	50.0	52.1		ug/L		104	60 - 140	2	30
Toluene	50.0	51.1		ug/L		102	70 - 130	0	30
Total BTEX	250	260		ug/L		104	80 - 120	1	30
Xylenes, Total	100	104		ug/L		104	80 - 120	2	30
Chlorobenzene	50.0	51.0		ug/L		102	65 - 135	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	101		73 - 122
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	102		79 - 119

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	ND		25.0	24.5		ug/L		98	18 - 190
1,3-Dichlorobenzene	ND		25.0	24.4		ug/L		98	59 - 156
1,4-Dichlorobenzene	ND		25.0	26.2		ug/L		105	18 - 190
Benzene	ND		25.0	26.8		ug/L		107	37 - 151
Ethylbenzene	ND		25.0	26.1		ug/L		104	37 - 162
Toluene	ND		25.0	25.6		ug/L		102	47 - 150
Total BTEX	ND		125	131		ug/L		104	80 - 120
Xylenes, Total	ND		50.0	52.0		ug/L		104	80 - 120
Chlorobenzene	ND		25.0	25.4		ug/L		102	37 - 160

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	101		73 - 122
Toluene-d8 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	101		79 - 119

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichlorobenzene	ND		25.0	26.1		ug/L		104	18 - 190	6	30
1,3-Dichlorobenzene	ND		25.0	26.1		ug/L		104	59 - 156	7	30
1,4-Dichlorobenzene	ND		25.0	27.5		ug/L		110	18 - 190	5	30
Benzene	ND		25.0	27.7		ug/L		111	37 - 151	4	30
Ethylbenzene	ND		25.0	28.0		ug/L		112	37 - 162	7	30
Toluene	ND		25.0	26.6		ug/L		106	47 - 150	4	30
Total BTEX	ND		125	137		ug/L		110	80 - 120	5	30
Xylenes, Total	ND		50.0	54.6		ug/L		109	80 - 120	5	30

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	ND		25.0	26.6		ug/L		106	37 - 160	4	30
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>MSD Limits</b>								
1,2-Dichloroethane-d4 (Surr)	101		73 - 122								
Toluene-d8 (Surr)	105		80 - 120								
4-Bromofluorobenzene (Surr)	102		79 - 119								

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-712008/1-A**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>MB Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	79		22 - 120				09/04/25 14:30	09/05/25 17:12	1
2-Fluorophenol	53		23 - 120				09/04/25 14:30	09/05/25 17:12	1
2,4,6-Tribromophenol	81		41 - 134				09/04/25 14:30	09/05/25 17:12	1
Nitrobenzene-d5	89		36 - 120				09/04/25 14:30	09/05/25 17:12	1
Phenol-d5	37		15 - 120				09/04/25 14:30	09/05/25 17:12	1
Terphenyl-d14	100		54 - 127				09/04/25 14:30	09/05/25 17:12	1

**Lab Sample ID: LCS 280-712008/2-A**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	80.0	70.4		ug/L		88	47 - 145
Acenaphthylene	80.0	71.8		ug/L		90	33 - 145
Anthracene	80.0	77.1		ug/L		96	27 - 133
Benzo[a]anthracene	80.0	76.4		ug/L		96	33 - 143

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 280-712008/2-A**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[b]fluoranthene	80.0	81.1		ug/L		101	24 - 159
Benzo[k]fluoranthene	80.0	77.4		ug/L		97	11 - 162
Benzo[a]pyrene	80.0	77.9		ug/L		97	17 - 163
Chrysene	80.0	72.8		ug/L		91	17 - 168
Dibenz(a,h)anthracene	80.0	78.0		ug/L		98	1 - 227
Fluoranthene	80.0	76.5		ug/L		96	26 - 137
Fluorene	80.0	71.6		ug/L		90	59 - 121
Indeno[1,2,3-cd]pyrene	80.0	79.4		ug/L		99	1 - 171
Naphthalene	80.0	61.9		ug/L		77	21 - 133
Phenanthrene	80.0	75.9		ug/L		95	54 - 120
Pyrene	80.0	77.7		ug/L		97	52 - 120
Benzo[g,h,i]perylene	80.0	74.8		ug/L		94	1 - 219

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	90		22 - 120
2-Fluorophenol	61		23 - 120
2,4,6-Tribromophenol	99		41 - 134
Nitrobenzene-d5	95		36 - 120
Phenol-d5	44		15 - 120
Terphenyl-d14	100		54 - 127

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		80.0	53.4		ug/L		67	47 - 145
Acenaphthylene	ND		80.0	53.4		ug/L		67	33 - 145
Anthracene	ND		80.0	72.8		ug/L		91	27 - 133
Benzo[a]anthracene	ND		80.0	77.0		ug/L		96	33 - 143
Benzo[b]fluoranthene	ND		80.0	82.3		ug/L		103	24 - 159
Benzo[k]fluoranthene	ND		80.0	74.9		ug/L		94	11 - 162
Benzo[a]pyrene	ND		80.0	79.2		ug/L		99	17 - 163
Chrysene	ND		80.0	71.7		ug/L		90	17 - 168
Dibenz(a,h)anthracene	ND		80.0	81.6		ug/L		102	1 - 227
Fluoranthene	ND		80.0	75.5		ug/L		94	26 - 137
Fluorene	ND		80.0	58.9		ug/L		74	59 - 121
Indeno[1,2,3-cd]pyrene	ND		80.0	82.7		ug/L		103	1 - 171
Naphthalene	ND		80.0	41.5		ug/L		52	21 - 133
Phenanthrene	ND		80.0	70.5		ug/L		88	54 - 120
Pyrene	ND		80.0	77.2		ug/L		96	52 - 120
Benzo[g,h,i]perylene	ND		80.0	80.2		ug/L		100	1 - 219

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	65		22 - 120
2-Fluorophenol	41		23 - 120
2,4,6-Tribromophenol	87		41 - 134
Nitrobenzene-d5	66		36 - 120

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Surrogate	MS %Recovery	MS Qualifier	Limits
Phenol-d5	32		15 - 120
Terphenyl-d14	96		54 - 127

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		80.0	51.4		ug/L		64	47 - 145	4	48
Acenaphthylene	ND		80.0	52.0		ug/L		65	33 - 145	3	74
Anthracene	ND		80.0	69.5		ug/L		87	27 - 133	5	66
Benzo[a]anthracene	ND		80.0	74.1		ug/L		93	33 - 143	4	53
Benzo[b]fluoranthene	ND		80.0	79.1		ug/L		99	24 - 159	4	71
Benzo[k]fluoranthene	ND		80.0	71.1		ug/L		89	11 - 162	5	63
Benzo[a]pyrene	ND		80.0	73.9		ug/L		92	17 - 163	7	72
Chrysene	ND		80.0	69.0		ug/L		86	17 - 168	4	87
Dibenz(a,h)anthracene	ND		80.0	76.3		ug/L		95	1 - 227	7	126
Fluoranthene	ND		80.0	71.3		ug/L		89	26 - 137	6	66
Fluorene	ND		80.0	59.1		ug/L		74	59 - 121	0	38
Indeno[1,2,3-cd]pyrene	ND		80.0	78.4		ug/L		98	1 - 171	5	99
Naphthalene	ND		80.0	37.8		ug/L		47	21 - 133	9	65
Phenanthrene	ND		80.0	67.5		ug/L		84	54 - 120	4	39
Pyrene	ND		80.0	75.5		ug/L		94	52 - 120	2	49
Benzo[g,h,i]perylene	ND		80.0	76.6		ug/L		96	1 - 219	5	97

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	65		22 - 120
2-Fluorophenol	42		23 - 120
2,4,6-Tribromophenol	90		41 - 134
Nitrobenzene-d5	65		36 - 120
Phenol-d5	33		15 - 120
Terphenyl-d14	98		54 - 127

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID: MB 280-711887/1-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	60	ug/L		09/03/25 18:24	09/04/25 17:51	1
Magnesium	ND		200	50	ug/L		09/03/25 18:24	09/04/25 17:51	1

**Lab Sample ID: LCS 280-711887/2-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	47800		ug/L		96	85 - 115

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

**Lab Sample ID: LCS 280-711887/2-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	50000	46800		ug/L		94	85 - 115

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	24000		50000	70100		ug/L		93	75 - 125
Magnesium	6300		50000	52200		ug/L		92	75 - 125

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	24000		50000	69800		ug/L		93	75 - 125	0	20
Magnesium	6300		50000	52200		ug/L		92	75 - 125	0	20

## Method: 200.8 - Metals (ICP/MS)

**Lab Sample ID: MB 280-711870/1-A**  
**Matrix: Water**  
**Analysis Batch: 712808**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 711870**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:13	1

**Lab Sample ID: LCS 280-711870/2-A**  
**Matrix: Water**  
**Analysis Batch: 712808**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 711870**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	41.8		ug/L		104	90 - 115

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712931**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Dissolved**  
**Prep Batch: 711870**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	3.4		40.0	42.8		ug/L		98	90 - 115

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712931**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Dissolved**  
**Prep Batch: 711870**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	3.4		40.0	42.5		ug/L		98	90 - 115	1	20

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## GC/MS VOA

### Analysis Batch: 712089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	624.1	
280-212807-5	AWL-25-02596-005	Total/NA	Water	624.1	
280-212807-8	AWL-25-02596-008	Total/NA	Water	624.1	
MB 280-712089/9	Method Blank	Total/NA	Water	624.1	
LCS 280-712089/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-712089/5	Lab Control Sample Dup	Total/NA	Water	624.1	

### Analysis Batch: 712325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-11	AWL-25-02596-011	Total/NA	Water	624.1	
280-212807-12	AWL-25-02596-012	Total/NA	Water	624.1	
280-212807-13	AWL-25-02596-013	Total/NA	Water	624.1	
MB 280-712325/9	Method Blank	Total/NA	Water	624.1	
LCS 280-712325/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-712325/5	Lab Control Sample Dup	Total/NA	Water	624.1	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	624.1	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	624.1	

## GC/MS Semi VOA

### Prep Batch: 712008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	625	
280-212807-5	AWL-25-02596-005	Total/NA	Water	625	
280-212807-8	AWL-25-02596-008	Total/NA	Water	625	
280-212807-11	AWL-25-02596-011	Total/NA	Water	625	
280-212807-12	AWL-25-02596-012	Total/NA	Water	625	
MB 280-712008/1-A	Method Blank	Total/NA	Water	625	
LCS 280-712008/2-A	Lab Control Sample	Total/NA	Water	625	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	625	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	625	

### Analysis Batch: 712240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	625.1	712008
280-212807-5	AWL-25-02596-005	Total/NA	Water	625.1	712008
280-212807-8	AWL-25-02596-008	Total/NA	Water	625.1	712008
280-212807-11	AWL-25-02596-011	Total/NA	Water	625.1	712008
280-212807-12	AWL-25-02596-012	Total/NA	Water	625.1	712008
MB 280-712008/1-A	Method Blank	Total/NA	Water	625.1	712008
LCS 280-712008/2-A	Lab Control Sample	Total/NA	Water	625.1	712008
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	625.1	712008
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	625.1	712008

## Metals

### Prep Batch: 711870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Dissolved	Water	200.8	
280-212807-2	AWL-25-02596-002	Dissolved	Water	200.8	
280-212807-3	AWL-25-02596-003	Dissolved	Water	200.8	
280-212807-4	AWL-25-02596-004	Dissolved	Water	200.8	

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Metals (Continued)

### Prep Batch: 711870 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-5	AWL-25-02596-005	Dissolved	Water	200.8	
280-212807-6	AWL-25-02596-006	Dissolved	Water	200.8	
280-212807-7	AWL-25-02596-007	Dissolved	Water	200.8	
280-212807-8	AWL-25-02596-008	Dissolved	Water	200.8	
280-212807-9	AWL-25-02596-009	Dissolved	Water	200.8	
280-212807-10	AWL-25-02596-010	Dissolved	Water	200.8	
280-212807-11	AWL-25-02596-011	Dissolved	Water	200.8	
280-212807-12	AWL-25-02596-012	Dissolved	Water	200.8	
MB 280-711870/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-711870/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-212807-11 MS	AWL-25-02596-011	Dissolved	Water	200.8	
280-212807-11 MSD	AWL-25-02596-011	Dissolved	Water	200.8	

### Prep Batch: 711887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Total/NA	Water	200.7	
280-212807-2	AWL-25-02596-002	Total/NA	Water	200.7	
280-212807-3	AWL-25-02596-003	Total/NA	Water	200.7	
280-212807-4	AWL-25-02596-004	Total/NA	Water	200.7	
280-212807-5	AWL-25-02596-005	Total/NA	Water	200.7	
280-212807-6	AWL-25-02596-006	Total/NA	Water	200.7	
280-212807-7	AWL-25-02596-007	Total/NA	Water	200.7	
280-212807-8	AWL-25-02596-008	Total/NA	Water	200.7	
280-212807-9	AWL-25-02596-009	Total/NA	Water	200.7	
280-212807-10	AWL-25-02596-010	Total/NA	Water	200.7	
280-212807-11	AWL-25-02596-011	Total/NA	Water	200.7	
280-212807-12	AWL-25-02596-012	Total/NA	Water	200.7	
MB 280-711887/1-A	Method Blank	Total/NA	Water	200.7	
LCS 280-711887/2-A	Lab Control Sample	Total/NA	Water	200.7	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	200.7	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	200.7	

### Analysis Batch: 712150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-2	AWL-25-02596-002	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-3	AWL-25-02596-003	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-4	AWL-25-02596-004	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-5	AWL-25-02596-005	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-6	AWL-25-02596-006	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-7	AWL-25-02596-007	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-8	AWL-25-02596-008	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-9	AWL-25-02596-009	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-10	AWL-25-02596-010	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-12	AWL-25-02596-012	Total/NA	Water	200.7 Rev 4.4	711887
MB 280-711887/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	711887
LCS 280-711887/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Metals

### Analysis Batch: 712808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Dissolved	Water	200.8	711870
280-212807-2	AWL-25-02596-002	Dissolved	Water	200.8	711870
280-212807-3	AWL-25-02596-003	Dissolved	Water	200.8	711870
280-212807-4	AWL-25-02596-004	Dissolved	Water	200.8	711870
280-212807-5	AWL-25-02596-005	Dissolved	Water	200.8	711870
280-212807-6	AWL-25-02596-006	Dissolved	Water	200.8	711870
280-212807-7	AWL-25-02596-007	Dissolved	Water	200.8	711870
280-212807-8	AWL-25-02596-008	Dissolved	Water	200.8	711870
280-212807-9	AWL-25-02596-009	Dissolved	Water	200.8	711870
280-212807-10	AWL-25-02596-010	Dissolved	Water	200.8	711870
280-212807-12	AWL-25-02596-012	Dissolved	Water	200.8	711870
MB 280-711870/1-A	Method Blank	Total Recoverable	Water	200.8	711870
LCS 280-711870/2-A	Lab Control Sample	Total Recoverable	Water	200.8	711870

### Analysis Batch: 712931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-11	AWL-25-02596-011	Dissolved	Water	200.8	711870
280-212807-11 MS	AWL-25-02596-011	Dissolved	Water	200.8	711870
280-212807-11 MSD	AWL-25-02596-011	Dissolved	Water	200.8	711870

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-001**

**Lab Sample ID: 280-212807-1**

**Date Collected: 08/28/25 11:33**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:00	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:28	LMT	EET DEN

**Client Sample ID: AWL-25-02596-002**

**Lab Sample ID: 280-212807-2**

**Date Collected: 08/28/25 11:43**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:04	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:31	LMT	EET DEN

**Client Sample ID: AWL-25-02596-003**

**Lab Sample ID: 280-212807-3**

**Date Collected: 08/28/25 10:25**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:16	MD	EET DEN
Total/NA	Prep	625			235.2 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 18:19	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:08	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:35	LMT	EET DEN

**Client Sample ID: AWL-25-02596-004**

**Lab Sample ID: 280-212807-4**

**Date Collected: 08/28/25 09:48**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:13	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:39	LMT	EET DEN

**Client Sample ID: AWL-25-02596-005**

**Lab Sample ID: 280-212807-5**

**Date Collected: 08/28/25 08:03**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:36	MD	EET DEN
Total/NA	Prep	625			247.5 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 18:41	PW	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-005**

**Lab Sample ID: 280-212807-5**

**Date Collected: 08/28/25 08:03**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:17	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:42	LMT	EET DEN

**Client Sample ID: AWL-25-02596-006**

**Lab Sample ID: 280-212807-6**

**Date Collected: 08/28/25 08:18**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:21	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:46	LMT	EET DEN

**Client Sample ID: AWL-25-02596-007**

**Lab Sample ID: 280-212807-7**

**Date Collected: 08/28/25 08:28**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:26	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:49	LMT	EET DEN

**Client Sample ID: AWL-25-02596-008**

**Lab Sample ID: 280-212807-8**

**Date Collected: 08/28/25 09:20**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:57	MD	EET DEN
Total/NA	Prep	625			264.8 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 19:04	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:43	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:53	LMT	EET DEN

**Client Sample ID: AWL-25-02596-009**

**Lab Sample ID: 280-212807-9**

**Date Collected: 08/28/25 08:58**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:47	ADL	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-009**

**Lab Sample ID: 280-212807-9**

**Date Collected: 08/28/25 08:58**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 09:04	LMT	EET DEN

**Client Sample ID: AWL-25-02596-010**

**Lab Sample ID: 280-212807-10**

**Date Collected: 08/28/25 12:15**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:52	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 09:07	LMT	EET DEN

**Client Sample ID: AWL-25-02596-011**

**Lab Sample ID: 280-212807-11**

**Date Collected: 08/28/25 10:50**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 08:18	MD	EET DEN
Total/NA	Prep	625			250 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 19:26	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:56	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712931	09/11/25 09:23	LMT	EET DEN

**Client Sample ID: AWL-25-02596-012**

**Lab Sample ID: 280-212807-12**

**Date Collected: 08/28/25 11:05**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 08:39	MD	EET DEN
Total/NA	Prep	625			254 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 20:32	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 19:18	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:45	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 11:58	LMT	EET DEN

**Client Sample ID: AWL-25-02596-013**

**Lab Sample ID: 280-212807-13**

**Date Collected: 08/28/25 08:03**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 06:31	MD	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Accreditation/Certification Summary

Client: Alaska Water Laboratories  
 Project/Site: AWL-25-02596

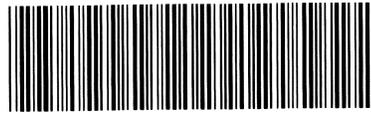
Job ID: 280-212807-1

## Laboratory: Eurofins Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	18-001	11-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Calcium
200.7 Rev 4.4	200.7	Water	Magnesium
624.1		Water	Total BTEX
Oregon	NELAP	4025	01-08-26





<b>FROM:</b> Alaska Water Laboratories LLC. 281 N. Main St, STE 101 Wasilla AK 99654 Mary @AKWaterLabs.com		<b>Sub-Contracted Lab:</b> EET-Denver 4955 Yarrow St Arvada, CO 80002		
<b>Client Project Name:</b>	AWL-25-02596	<b>Certification Required:</b>	Alaska Wastewater	
<b>Requested Due Date (if not standard TAT):</b>	Standard	<b>Notes:</b> Level 2 report	Report to MDL Provide EDD	
Samples				
AWL ID	Collection Date/ Time	Analysis	Comments	Matrix
AWL-25-02596-001-3	08/28/2025 11:33	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-001-4	08/28/2025 11:33	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-002-3	08/28/2025 11:43	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-002-4	08/28/2025 11:43	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-003-3	08/28/2025 10:25	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-003-4	08/28/2025 10:25	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-003-5	08/28/2025 10:25	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-003-6	08/28/2025 10:25	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-004-3	08/28/2025 09:48	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-004-4	08/28/2025 09:48	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-005-3	08/28/2025 08:03	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-005-4	08/28/2025 08:03	200.7	200.7 Ca, Mg ; pH<2	WW

*M. [Signature]*

SEP 02 2025 09 30

*ML EETDEN 9-3-25*

*2-6°C PABUCF-0-20955*



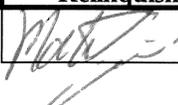
AWL-25-02596-005-5	08/28/2025 08:03	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-005-6	08/28/2025 08:03	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-006-3	08/28/2025 08:18	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-006-4	08/28/2025 08:18	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-007-3	08/28/2025 08:28	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-007-4	08/28/2025 08:28	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-008-3	08/28/2025 09:20	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-008-4	08/28/2025 09:20	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-008-5	08/28/2025 09:20	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-008-6	08/28/2025 09:20	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-009-3	08/28/2025 08:58	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-009-4	08/28/2025 08:58	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-010-3	08/28/2025 12:15	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-010-4	08/28/2025 12:15	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-011-3	08/28/2025 10:50	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL. Primary, MS/MSD - xvol sent	WW
AWL-25-02596-011-4	08/28/2025 10:50	200.7	200.7 Ca, Mg ; pH<2 Primary/MS/MSD - x vol sent	WW

*[Handwritten signature]*

SEP 02 2025 09 30

*[Handwritten signature]* EETIDEN 9-3-25  
0955



AWL-25-02596-011-5	08/28/2025 10:50	625 PAH	EPA 625.1 PAH Primary, MS/MSD - xvol sent	WW
AWL-25-02596-011-6	08/28/2025 10:50	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/MSD - xvol sent	WW
AWL-25-02596-012-3	08/28/2025 11:05	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL.	WW
AWL-25-02596-012-4	08/28/2025 11:05	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-012-5	08/28/2025 11:05	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-012-6	08/28/2025 11:05	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-013-1	08/28/2025 08:03	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK	AQ
<b>Relinquished By:</b>	<b>Date &amp; Time:</b>	<b>Received By:</b>	<b>Date &amp; Time:</b>	<b>Temp:</b>
	SEP 02 2025 09:30			

CoC Seal? Y / N

pH:

Ice: Frozen  
Melted / None

<b>Relinquished By:</b>	<b>Date &amp; Time:</b>	<b>Received By:</b>	<b>Date &amp; Time:</b>	<b>Temp:</b>

CoC Seal? Y / N

pH:

Ice: Frozen  
Melted / None

⊕ PAH must be extracted by

Thursday 4-4-25 (max)

M EETDEN 9-3-25  
0955

# Login Sample Receipt Checklist

Client: Alaska Water Laboratories

Job Number: 280-212807-1

**Login Number: 212807**

**List Number: 1**

**Creator: Bieniulis, Dylan T**

**List Source: Eurofins Denver**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	N/A	
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	



**Appendix C4**  
**Laboratory Data Package**  
**Storm Event #4**



*This page intentionally left blank.*

**Alaska Laboratory AK01000**

**Client** HDR Inc

**Contact** Cindy Helmericks

**Project Name** MOA Stormwater Monitoring - Sampling 2 2025

**AWL #** AWL-25-02596

**PWS #** Non PWS

Please direct any questions regarding the final report to your Project Manager [Alex@AKWaterLabs.com](mailto:Alex@AKWaterLabs.com) or [Mary@AKWaterLabs.com](mailto:Mary@AKWaterLabs.com), or call the lab for general questions.

Alaska Water Laboratories is an approved ADEC certified lab for wet chemistry and Microbiology; the results presented in this report meet the requirement of the laboratory's certifications and internal QC processes. Any exceptions will be noted in the case narratives attached. Subcontract data will be entered into AWL final reports. Full subcontract reports are available upon request.

The attached should contain analytical results for the analyses submitted on the client chain of custody. The information includes no opinions of the analysts or labs, data is represented after meeting certified testing requirements, and quality control measures.

Reproduction of the report requires the written approval of the laboratory.



Alexandria Smoot

Project Manager

09/16/2025

---

AWL Laboratory Management

Date

**Alaska Laboratory #AK01000**

Client Project Name	MOA Stormwater Monitoring - Sampling 2 2025	AWL #	AWL-25-02596
Receipt Date and Time	08/28/2025 13:47	Due Date	09/19/2025
Cooler Temperature (C)	Dark Blue Cooler #1 11.5C 136A; Dark Blue Cooler #2 7.4C 136A; Teal Blue Cooler #3 4.3C	Sampler Initials	MZ CK
Sample receipt comments	Samples received by MCC on 08/28/2025 at Dark Blue Cooler #1 11.5C 136A; Dark Blue Cooler #2 7.4C 136A; Teal Blue Cooler #3 (all VOA Vial's) 4.3C 136A. No Bubbles in VOA Vial's. All Hardness pH< 2, Cu filtered and Preserved at lab		
Log In	VJG 08/28/2025 (Cover Page Only); AKS 08/29/2025	DQO	VJG 08/29/2025

**Samples Received**

Sample Location	AWL ID	Collection Date/Time	Analysis Date/Time	Analysis	Notes
SWM 03-02	AWL-25-02596-001-1	08/28/2025 11:33	9/2/25 15:02	SM2540D	
SWM 03-02	AWL-25-02596-001-1	08/28/2025 11:33	9/2/25 15:02	SM5210B BOD	
SWM 03-02	AWL-25-02596-001-2	08/28/2025 11:33	08/28/25 15:08	SM9222D Fecal Coliform by MF	00247
SWM 03-02	AWL-25-02596-001-3	08/28/2025 11:33	9/10/25 8:28	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 03-02	AWL-25-02596-001-4	08/28/2025 11:33	9/4/25 18:00	200.7	200.7 Ca, Mg ; pH<2
SWM 03-02	AWL-25-02596-001-4	08/28/2025 11:33	9/15/25 08:40	SM2340B	200.7 Ca, Mg ; pH<2
SWM 04-02	AWL-25-02596-002-1	08/28/2025 11:43	9/2/25 15:02	SM5210B BOD	
SWM 04-02	AWL-25-02596-002-1	08/28/2025 11:43	9/2/25 15:02	SM2540D	
SWM 04-02	AWL-25-02596-002-2	08/28/2025 11:43	08/28/25 15:08	SM9222D Fecal Coliform by MF	00249

SWM 04-02	AWL-25-02596-002-3	08/28/2025 11:43	9/10/25 8:31	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 04-02	AWL-25-02596-002-4	08/28/2025 11:43	9/4/25 18:04	200.7	200.7 Ca, Mg ; pH<2
SWM 04-02	AWL-25-02596-002-4	08/28/2025 11:43	9/15/25 08:41	SM2340B	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-1	08/28/2025 10:25	9/2/25 15:02	SM2540D	
SWM 05-02	AWL-25-02596-003-1	08/28/2025 10:25	9/2/25 15:02	SM5210B BOD	
SWM 05-02	AWL-25-02596-003-2	08/28/2025 10:25	08/28/25 15:08	SM9222D Fecal Coliform by MF	00248
SWM 05-02	AWL-25-02596-003-3	08/28/2025 10:25	9/10/25 8:35	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 05-02	AWL-25-02596-003-4	08/28/2025 10:25	9/4/25 18:08	200.7	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-4	08/28/2025 10:25	9/15/25 08:43	SM2340B	200.7 Ca, Mg ; pH<2
SWM 05-02	AWL-25-02596-003-5	08/28/2025 10:25	9/5/25 18:19	625 PAH	EPA 625.1 PAH
SWM 05-02	AWL-25-02596-003-6	08/28/2025 10:25	9/5/25 12:16	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total

SWM 05-02	AWL-25-02596-003-6	08/28/2025 10:25	9/16/2025 09:47	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 06-02	AWL-25-02596-004-1	08/28/2025 09:48	9/2/25 15:02	SM2540D	
SWM 06-02	AWL-25-02596-004-1	08/28/2025 09:48	9/2/25 15:02	SM5210B BOD	
SWM 06-02	AWL-25-02596-004-2	08/28/2025 09:48	08/28/25 15:08	SM9222D Fecal Coliform by MF	00384
SWM 06-02	AWL-25-02596-004-3	08/28/2025 09:48	9/10/25 8:39	200.8	200.8: Cu Sample filtered and preserved at AWL
SWM 06-02	AWL-25-02596-004-4	08/28/2025 09:48	9/4/25 18:13	200.7	200.7 Ca, Mg ; pH<2
SWM 06-02	AWL-25-02596-004-4	08/28/2025 09:48	9/15/25 08:45	SM2340B	200.7 Ca, Mg ; pH<2
SWM 07-02	AWL-25-02596-005-1	08/28/2025 08:03	9/2/25 15:02	SM5210B BOD	
SWM 07-02	AWL-25-02596-005-1	08/28/2025 08:03	9/2/25 15:02	SM2540D	
SWM 07-02	AWL-25-02596-005-2	08/28/2025 08:03	08/28/25 15:08	SM9222D Fecal Coliform by MF	00383
SWM 07-02	AWL-25-02596-005-3	08/28/2025 08:03	9/10/25 8:42	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 07-02	AWL-25-02596-005-4	08/28/2025 08:03	9/4/25 18:17	200.7	200.7 Ca, Mg ; pH<2

SWM 07-02	AWL-25-02596-005-4	08/28/2025 08:03	9/15/25 08:46	SM2340B	200.7 Ca, Mg ; pH<2
SWM 07-02	AWL-25-02596-005-5	08/28/2025 08:03	9/5/25 18:41	625 PAH	EPA 625.1 PAH
SWM 07-02	AWL-25-02596-005-6	08/28/2025 08:03	9/5/25 12:36	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 07-02	AWL-25-02596-005-6	08/28/2025 08:03	9/16/2025 09:48	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 08-02	AWL-25-02596-006-1	08/28/2025 08:18	9/2/25 15:02	SM5210B BOD	
SWM 08-02	AWL-25-02596-006-1	08/28/2025 08:18	9/2/25 15:02	SM2540D	
SWM 08-02	AWL-25-02596-006-2	08/28/2025 08:18	08/28/25 15:08	SM9222D Fecal Coliform by MF	00381
SWM 08-02	AWL-25-02596-006-3	08/28/2025 08:18	9/10/25 8:46	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 08-02	AWL-25-02596-006-4	08/28/2025 08:18	9/4/25 18:21	200.7	200.7 Ca, Mg ; pH<2

SWM 08-02	AWL-25-02596-006-4	08/28/2025 08:18	9/15/25 08:48	SM2340B	200.7 Ca, Mg ; pH<2
SWM 08-02 Dup	AWL-25-02596-007-1	08/28/2025 08:28	9/2/25 15:02	SM2540D	
SWM 08-02 Dup	AWL-25-02596-007-1	08/28/2025 08:28	9/2/25 15:02	SM5210B BOD	
SWM 08-02 Dup	AWL-25-02596-007-2	08/28/2025 08:28	08/28/25 15:51	SM9222D Fecal Coliform by MF	00382
SWM 08-02 Dup	AWL-25-02596-007-3	08/28/2025 08:28	9/10/25 8:49	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 08-02 Dup	AWL-25-02596-007-4	08/28/2025 08:28	9/4/25 18:26	200.7	200.7 Ca, Mg ; pH<2
SWM 08-02 Dup	AWL-25-02596-007-4	08/28/2025 08:28	9/15/25 08:49	SM2340B	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-1	08/28/2025 09:20	9/2/25 15:02	SM5210B BOD	
SWM 09A-02	AWL-25-02596-008-1	08/28/2025 09:20	9/2/25 15:02	SM2540D	
SWM 09A-02	AWL-25-02596-008-2	08/28/2025 09:20	08/28/25 15:51	SM9222D Fecal Coliform by MF	00380
SWM 09A-02	AWL-25-02596-008-3	08/28/2025 09:20	9/10/25 8:53	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 09A-02	AWL-25-02596-008-4	08/28/2025 09:20	9/4/25 18:43	200.7	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-4	08/28/2025 09:20	9/15/25 08:50	SM2340B	200.7 Ca, Mg ; pH<2
SWM 09A-02	AWL-25-02596-008-5	08/28/2025 09:20	9/5/25 19:04	625 PAH	EPA 625.1 PAH

SWM 09A-02	AWL-25-02596-008-6	08/28/2025 09:20	9/5/25 12:57	624/624.1	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 09A-02	AWL-25-02596-008-6	08/28/2025 09:20	09/16/2025 09:51	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 10-02	AWL-25-02596-009-1	08/28/2025 08:58	9/2/25 15:02	SM2540D	
SWM 10-02	AWL-25-02596-009-1	08/28/2025 08:58	9/2/25 15:02	SM5210B BOD	
SWM 10-02	AWL-25-02596-009-2	08/28/2025 08:58	08/28/25 15:51	SM9222D Fecal Coliform by MF	00385
SWM 10-02	AWL-25-02596-009-3	08/28/2025 08:58	9/10/25 9:04	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 10-02	AWL-25-02596-009-4	08/28/2025 08:58	9/4/25 18:47	200.7	200.7 Ca, Mg ; pH<2
SWM 10-02	AWL-25-02596-009-4	08/28/2025 08:58	9/15/25 08:52	SM2340B	200.7 Ca, Mg ; pH<2
SWM 11-02	AWL-25-02596-010-1	08/28/2025 12:15	9/2/25 15:02	SM2540D	

SWM 11-02	AWL-25-02596-010-1	08/28/2025 12:15	9/2/25 15:02	SM5210B BOD	
SWM 11-02	AWL-25-02596-010-2	08/28/2025 12:15	08/28/25 15:51	SM9222D Fecal Coliform by MF	00386
SWM 11-02	AWL-25-02596-010-3	08/28/2025 12:15	9/10/25 9:07	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL
SWM 11-02	AWL-25-02596-010-4	08/28/2025 12:15	9/4/25 18:52	200.7	200.7 Ca, Mg ; pH<2
SWM 11-02	AWL-25-02596-010-4	08/28/2025 12:15	9/15/25 08:53	SM2340B	200.7 Ca, Mg ; pH<2
SWM 12-02	AWL-25-02596-011-1	08/28/2025 10:50	9/2/25 15:02	SM5210B BOD	
SWM 12-02	AWL-25-02596-011-1	08/28/2025 10:50	9/2/25 15:02	SM2540D	
SWM 12-02	AWL-25-02596-011-2	08/28/2025 10:50	08/28/25 15:51	SM9222D Fecal Coliform by MF	00240; 243 x vol
SWM 12-02	AWL-25-02596-011-3	08/28/2025 10:50	9/11/25 9:23	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL. Primary, MS/ MSD - xvol sent
SWM 12-02	AWL-25-02596-011-4	08/28/2025 10:50	9/4/25 18:56	200.7	200.7 Ca, Mg ; pH<2 Primary/MS/ MSD - x vol sent
SWM 12-02	AWL-25-02596-011-4	08/28/2025 10:50	9/15/25 08:54	SM2340B	200.7 Ca, Mg ; pH<2 Primary/MS/ MSD - x vol sent
SWM 12-02	AWL-25-02596-011-5	08/28/2025 10:50	9/5/25 19:26	625 PAH	EPA 625.1 PAH Primary, MS/ MSD - xvol sent

SWM 12-02	AWL-25-02596-011-6	08/28/2025 10:50	9/8/25 8:18	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/ MSD - xvcl sent
SWM 12-02	AWL-25-02596-011-6	08/28/2025 10:50	09/16/2025 09:53	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/ MSD - xvcl sent
SWM 12-02 Dup	AWL-25-02596-012-1	08/28/2025 11:05	9/2/25 15:02	SM2540D	
SWM 12-02 Dup	AWL-25-02596-012-1	08/28/2025 11:05	9/2/25 15:02	SM5210B BOD	
SWM 12-02 Dup	AWL-25-02596-012-2	08/28/2025 11:05	08/28/25 15:51	SM9222D Fecal Coliform by MF	00246
SWM 12-02 Dup	AWL-25-02596-012-3	08/28/2025 11:05	9/10/25 11:58	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL.
SWM 12-02 Dup	AWL-25-02596-012-4	08/28/2025 11:05	9/4/25 19:18	200.7	200.7 Ca, Mg ; pH<2
SWM 12-02 Dup	AWL-25-02596-012-4	08/28/2025 11:05	9/15/25 08:55	SM2340B	200.7 Ca, Mg ; pH<2

SWM 12-02 Dup	AWL-25-02596-012-5	08/28/2025 11:05	9/5/25 20:32	625 PAH	EPA 625.1 PAH
SWM 12-02 Dup	AWL-25-02596-012-6	08/28/2025 11:05	9/8/25 8:39	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM 12-02 Dup	AWL-25-02596-012-6	08/28/2025 11:05	09/16/2025 09:54	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total
SWM Trip Blank -02	AWL-25-02596-013-1	08/28/2025 08:03	9/8/25 6:31	624/624.1	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK

SWM Trip Blank -02	AWL-25-02596-013-1	08/28/2025 08:03	09/16/2025 09:55	TAqH/TAH Calculation	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK
--------------------	--------------------	------------------	------------------	----------------------	---

**Analytical Methods**

Analyte	Analytical Method	Comments
BOD	SM5210B BOD	
Fecal Coliform	SM9222D Fecal Coliform by MF	
Ca, Mg	200.7	
Cu	200.8	
624 TAH	624 TAH	
625 PAH	625 PAH	
TAqH and TAH	Calculation	
Hardness	SM2340B Total Hardness	
TSS	SM2540D Total Suspended Solids	

Comments: Extra Volume goes to sublab for MS/MSD with SWM 12-01 sample for metals and 624/625 - AKS 8/29/25

Include lab QC in Report

Subcoc sent to EET Denver 8/29/25 - AKS

**Alaska Laboratory #AK01000**

**Definitions:**

DUP: Sample Duplicate  
LCS/LCSD: Laboratory Control Sample/Laboratory Control Sample Duplicate  
MRL: Method Reporting Limit  
MB: Method Blank  
MCL: Maximum Contaminant Limit  
MDL: Method Detection Limit  
MS/MSD: Matrix Spike/Matrix Spike Duplicate  
N/A: Not Applicable  
TNTC: Cell count is Too Numerous To Count  
<MDL: Result recovery is below the laboratory detectable limit, listed as the MDL.

**Data Qualifiers:**

B: The result of both the method blank and the target sample were recovered above the MDL.  
D: Sample was diluted prior to analysis.  
J: The reported result was recovered below the MRL (Method Reporting Limit), but above the MDL (Method Detection Limit), and should be considered an estimate.  
U: Result was recovered below the MDL, MRL, LOD, and LOQ.  
\*: The LCS/LCSD or DUP was recovered outside method specified control limits.  
H: Sample was received or analyzed outside of method specified holding time.  
E: Sample recovery is equal to or exceeded the MCL.  
Q: One or more Quality Control criteria was recovered outside of control limits.

**General Comments:**

1.0) Basis: "As Received" = Analyzed as received from client. "Dry" = dried prior to being analyzed. "Dry Weight Corrected" = analyzed as received, result corrected for percent moisture.

**Alaska Laboratory #AK01000**

**Analytical Results**

Client HDR Inc Project MOA Stormwater Monitoring - Sampling 2 2025

Contact Cindy Helmericks PWS # Non PWS

Project MOA Stormwater Monitoring - Sampling 2 2025

Sample Location: SWM 03-02 Collection Date/Time: 08/28/2025 11:33

AWL ID/ Fraction: AWL-25-02596-001-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	2.35	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	<MDL	mg/L	15.8	7.1		1.42	U	SM2540D	BKC	9/2/25 15:02

Comments: The result was less than the MDL. The result was 5.24 mg/L. Whole volume was used. BKC 9/4/25

Sample Location: SWM 03-02 Collection Date/Time: 08/28/2025 11:33

AWL ID/ Fraction: AWL-25-02596-001-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Anaylst Initials
Fecal Coliform	470.00	CFU/100mL	10.00			10.00	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-3 Matrix WW Sub Lab ID: 280-212807-1

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.4	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:28

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-4 Matrix WW Sub Lab ID: 280-212807-1

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	18000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:00
Magnesium	6600	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:00

Comments:

Sample Location: SWM 03-02 SPID: Collection Date/Time: 08/28/2025 11:33

FCID:

AWL ID/ Fraction: AWL-25-02596-001-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	72.12	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:40

Comments:

Sample Location: SWM 04-02

Collection Date/Time: 08/28/2025 11:43

AWL ID/ Fraction: AWL-25-02596-002-1

Matrix WW

Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	5.34	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-1

Matrix WW

Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	9.19	mg/L	16.47	7.4		1.48	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 04-02

Collection Date/Time: 08/28/2025 11:43

AWL ID/ Fraction: AWL-25-02596-002-2

Matrix WW

Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	3800.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-3

Matrix WW

Sub Lab ID: 280-212807-2

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.9	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:31

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-4

Matrix WW

Sub Lab ID: 280-212807-2

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	23000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:04
Magnesium	6100	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:04

Comments:

Sample Location: SWM 04-02

SPID:

Collection Date/Time: 08/28/2025 11:43

FCID:

AWL ID/ Fraction: AWL-25-02596-002-4

Matrix WW

Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	82.55	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:41

Comments:

Sample Location: SWM 05-02

Collection Date/Time: 08/28/2025 10:25

AWL ID/ Fraction: AWL-25-02596-003-1

Matrix WW

Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	6.00	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	14.08	mg/L	20.36	9.15		1.83	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 05-02 Collection Date/Time: 08/28/2025 10:25

AWL ID/ Fraction: AWL-25-02596-003-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	5500.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-3 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.9	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:35

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-4 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	17000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:08
Magnesium	2600	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:08

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	53.16	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:43

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-5 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Acenaphthylene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Anthracene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[a]anthracene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[b]fluoranthene	ND	ug/L	4.3	2.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[k]fluoranthene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Benzo[a]pyrene	ND	ug/L	4.3	2.1		1		625.1	Eurofins Denver	9/5/25 18:19
Chrysene	ND	ug/L	4.3	1.1		1		625.1	Eurofins Denver	9/5/25 18:19
Dibenz(a,h)anthracene	ND	ug/L	11	4.3		1		625.1	Eurofins Denver	9/5/25 18:19

Fluoranthene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Fluorene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Indeno[1,2,3-cd]pyrene	ND	ug/L	11	4.3	1	625.1	Eurofins Denver	9/5/25 18:19
Naphthalene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Phenanthrene	ND	ug/L	4.3	1.1	1	625.1	Eurofins Denver	9/5/25 18:19
Pyrene	ND	ug/L	11	4.3	1	625.1	Eurofins Denver	9/5/25 18:19
Benzo[g,h,i]perylene	ND	ug/L	4.3	2.1	1	625.1	Eurofins Denver	9/5/25 18:19

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-6 Matrix WW Sub Lab ID: 280-212807-3

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:16
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:16

Comments:

Sample Location: SWM 05-02 SPID: Collection Date/Time: 08/28/2025 10:25

FCID:

AWL ID/ Fraction: AWL-25-02596-003-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	9/16/2025 09:47
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	9/16/2025 09:47

Comments:

Sample Location: SWM 06-02 Collection Date/Time: 08/28/2025 09:48

AWL ID/ Fraction: AWL-25-02596-004-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	4.15	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 06-02 Collection Date/Time: 08/28/2025 09:48

FCID:

AWL ID/ Fraction: AWL-25-02596-004-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	25.68	mg/L	16.91	7.6		1.52		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 06-02 Collection Date/Time: 08/28/2025 09:48

AWL ID/ Fraction: AWL-25-02596-004-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	781.82	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48  
FCID:  
AWL ID/ Fraction: AWL-25-02596-004-3 Matrix WW Sub Lab ID: 280-212807-4

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.7	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:39

Comments:

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48  
FCID:  
AWL ID/ Fraction: AWL-25-02596-004-4 Matrix WW Sub Lab ID: 280-212807-4

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	6900	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:13
Magnesium	1700	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:13

Comments:

Sample Location: SWM 06-02 SPID: Collection Date/Time: 08/28/2025 09:48  
FCID:  
AWL ID/ Fraction: AWL-25-02596-004-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	24.23	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:45

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03  
FCID:  
AWL ID/ Fraction: AWL-25-02596-005-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	5.89	mg/L	3	0.9		3		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03  
FCID:

AWL ID/ Fraction: AWL-25-02596-005-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	69.20	mg/L	44.51	20		4		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03  
FCID:  
AWL ID/ Fraction: AWL-25-02596-005-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	1909.09	CFU/100mL	90.91			90.91	SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 07-02 SPID: Collection Date/Time: 08/28/2025 08:03  
FCID:

AWL ID/ Fraction: AWL-25-02596-005-3 Matrix WW Sub Lab ID: 280-212807-5

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.3	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 8:42

Comments:

Sample Location:	SWM 07-02		SPID:	Collection Date/Time: 08/28/2025 08:03						
			FCID:							
AWL ID/ Fraction:	AWL-25-02596-005-4		Matrix	WW	Sub Lab ID: 280-212807-5					
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	3400	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:17
Magnesium	1300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:17

Comments:

Sample Location:	SWM 07-02		SPID:	Collection Date/Time: 08/28/2025 08:03						
			FCID:							
AWL ID/ Fraction:	AWL-25-02596-005-4		Matrix	WW	Batch ID:		091525-01-Hardness			
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	13.84	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:46

Comments:

Sample Location:	SWM 07-02		SPID:	Collection Date/Time: 08/28/2025 08:03						
			FCID:							
AWL ID/ Fraction:	AWL-25-02596-005-5		Matrix	WW	Sub Lab ID: 280-212807-5					
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Acenaphthylene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[a]anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[b]fluoranthene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[k]fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[a]pyrene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41
Chrysene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Dibenz(a,h)anthracene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Fluorene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Indeno[1,2,3-cd]pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Naphthalene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Phenanthrene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 18:41
Pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 18:41
Benzo[g,h,i]perylene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 18:41

Comments:

Sample Location:	SWM 07-02		SPID:	Collection Date/Time: 08/28/2025 08:03						
			FCID:							
AWL ID/ Fraction:	AWL-25-02596-005-6		Matrix	WW	Sub Lab ID:		280-212807-5			
Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:36
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:36

Comments:

Sample Location: SWM 07-02 SPID: Collection Date/Time 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-005-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	9/16/2025 09:48
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	9/16/2025 09:48

Comments:

Sample Location: SWM 08-02 Collection Date/Time: 08/28/2025 08:18

AWL ID/ Fraction: AWL-25-02596-006-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	6.25	mg/L	3	0.9		3		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	33.00	mg/L	27.82	12.5		2.5		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 08-02 Collection Date/Time: 08/28/2025 08:18

AWL ID/ Fraction: AWL-25-02596-006-2 Matrix WW Batch ID: 082825-01-FC

Analyte	Result	Units	MDL	MCL	DF	Flags	Method	Date/Time	Analyst Initials
Fecal Coliform	11300.00	CFU/100mL	100.00		100.00		SM9222D Fecal by MF	08/28/25 15:08	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-3 Matrix WW Sub Lab ID: 280-212807-6

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.6	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:46

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-4 Matrix WW Sub Lab ID: 280-212807-6

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	4200	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:21
Magnesium	970	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:21

Comments:

Sample Location: SWM 08-02 SPID: Collection Date/Time: 08/28/2025 08:18

FCID:

AWL ID/ Fraction: AWL-25-02596-006-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	14.48	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:48

Comments:

Sample Location: SWM 08-02 Dup Collection Date/Time: 08/28/2025 08:28

AWL ID/ Fraction: AWL-25-02596-007-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	5.08	mg/L	3	0.9			3	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	27.00	mg/L	22.25	10			2	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 08-02 Dup Collection Date/Time: 08/28/2025 08:28

AWL ID/ Fraction: AWL-25-02596-007-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	>20000	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-3 Matrix WW Sub Lab ID: 280-212807-7

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.7	ug/L	2	1			1	J	200.8 Eurofins Denver	9/10/25 8:49

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-4 Matrix WW Sub Lab ID: 280-212807-7

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	4800	ug/L	200	60			1	200.7 Rev 4.4	Eurofins Denver	9/4/25 18:26
Magnesium	990	ug/L	200	50			1	200.7 Rev 4.4	Eurofins Denver	9/4/25 18:26

Comments:

Sample Location: SWM 08-02 Dup SPID: Collection Date/Time: 08/28/2025 08:28

FCID:

AWL ID/ Fraction: AWL-25-02596-007-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	16.06	mg/L CaCO3	0.03	0.01			1	SM2340B Hardness	BKC	9/15/25 08:49

Comments:

Sample Location: SWM 09A-02 Collection Date/Time: 08/28/2025 09:20

AWL ID/ Fraction: AWL-25-02596-008-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	4.99	mg/L	4	1.2			4	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	26.00	mg/L	17.14	7.7		1.54		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 09A-02 Collection Date/Time: 08/28/2025 09:20

AWL ID/ Fraction: AWL-25-02596-008-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Anaylst Initials
Fecal Coliform	4800.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-3 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.4	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 8:53

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-4 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	21000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:43
Magnesium	3400	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:43

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	66.44	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:50

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-5 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Acenaphthylene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Anthracene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[a]anthracene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[b]fluoranthene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[k]fluoranthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Benzo[a]pyrene	ND	ug/L	3.8	1.9		1		625.1	Eurofins Denver	9/5/25 19:04
Chrysene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Dibenz(a,h)anthracene	ND	ug/L	9.4	3.8		1		625.1	Eurofins Denver	9/5/25 19:04
Fluoranthene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Fluorene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.4	3.8		1		625.1	Eurofins Denver	9/5/25 19:04
Naphthalene	ND	ug/L	3.8	0.94		1		625.1	Eurofins Denver	9/5/25 19:04

Phenanthrene	ND	ug/L	3.8	0.94	1	625.1	Eurofins Denver	9/5/25 19:04
Pyrene	ND	ug/L	9.4	3.8	1	625.1	Eurofins Denver	9/5/25 19:04
Benzo[g,h,i]perylene	ND	ug/L	3.8	1.9	1	625.1	Eurofins Denver	9/5/25 19:04

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-6 Matrix WW Sub Lab ID: 280-212807-8

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/5/25 12:57
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/5/25 12:57

Comments:

Sample Location: SWM 09A-02 SPID: Collection Date/Time: 08/28/2025 09:20

FCID:

AWL ID/ Fraction: AWL-25-02596-008-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:51
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:51

Comments:

Sample Location: SWM 10-02 Collection Date/Time: 08/28/2025 08:58

AWL ID/ Fraction: AWL-25-02596-009-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	2.02	mg/L	1.5	0.45			1.5	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 10-02 SPID: Collection Date/Time: 08/28/2025 08:58

FCID:

AWL ID/ Fraction: AWL-25-02596-009-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	<MDL	mg/L	17.58	7.9		1.58	U	SM2540D	BKC	9/2/25 15:02

Comments: The result was less than the MDL. The result was 7.74 mg/L. Whole volume was used. BKC 9/4/25

Sample Location: SWM 10-02 Collection Date/Time: 08/28/2025 08:58

AWL ID/ Fraction: AWL-25-02596-009-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	31000.00	CFU/100mL	1000.00			1000.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 10-02 SPID: Collection Date/Time: 08/28/2025 08:58

FCID:

AWL ID/ Fraction: AWL-25-02596-009-3 Matrix WW Sub Lab ID: 280-212807-9

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	1.9	ug/L	2	1		1	J	200.8	Eurofins Denver	9/10/25 9:04

Comments:

Sample Location:	SWM 10-02	SPID:		Collection Date/Time:	08/28/2025 08:58
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-009-4	Matrix	WW	Sub Lab ID:	280-212807-9

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	22000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:47
Magnesium	5800	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:47

Comments:

Sample Location:	SWM 10-02	SPID:		Collection Date/Time:	08/28/2025 08:58
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-009-4	Matrix	WW	Batch ID:	091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	78.82	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:52

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-1	Matrix	WW	Batch ID:	082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
BOD	4.00	mg/L	1.5	0.45		1.5		SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-1	Matrix	WW	Batch ID:	090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	65.60	mg/L	22.25	10		2		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-2	Matrix	WW	Batch ID:	082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	1563.64	CFU/100mL	9.09			9.09	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments:

Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-3	Matrix	WW	Sub Lab ID:	280-212807-10

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	2.5	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 9:07

Comments:

Sample Location:	SWM 11-02	SPID:		Collection Date/Time:	08/28/2025 12:15
		FCID:			
AWL ID/ Fraction:	AWL-25-02596-010-4	Matrix	WW	Sub Lab ID:	280-212807-10

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
---------	--------	-------	-----	-----	-----	----	-------	--------	---------	--------------------

Calcium	17000	ug/L	200	60	1	200.7 Rev 4.4	Eurofins Denver	9/4/25 18:52
Magnesium	2200	ug/L	200	50	1	200.7 Rev 4.4	Eurofins Denver	9/4/25 18:52

Comments:

Sample Location: SWM 11-02 SPID: Collection Date/Time: 08/28/2025 12:15  
FCID:  
AWL ID/ Fraction: AWL-25-02596-010-4 Matrix WW Batch ID: 091525-01-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	51.51	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:53

Comments:

Sample Location: SWM 12-02 Collection Date/Time: 08/28/2025 10:50  
AWL ID/ Fraction: AWL-25-02596-011-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	6.37	mg/L	3	0.9			3	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50  
FCID:

AWL ID/ Fraction: AWL-25-02596-011-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	23.00	mg/L	22.25	10		2		SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 12-02 Collection Date/Time: 08/28/2025 10:50  
AWL ID/ Fraction: AWL-25-02596-011-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	12900.00	CFU/100mL	100.00			100.00	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50  
FCID:

AWL ID/ Fraction: AWL-25-02596-011-3 Matrix WW Sub Lab ID: 280-212807-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.4	ug/L	2	1		1		200.8	Eurofins Denver	9/11/25 9:23

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50  
FCID:

AWL ID/ Fraction: AWL-25-02596-011-4 Matrix WW Sub Lab ID: 280-212807-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	24000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:56
Magnesium	6300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 18:56

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50  
FCID:

AWL ID/ Fraction: AWL-25-02596-011-4 Matrix WW Batch ID: 091525-02-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
---------	--------	-------	-----	-----	-----	----	-------	--------	---------	--------------------

Total Hardness	85.87	mg/L CaCO3	0.03	0.01	1	SM2340B Hardness	BKC	9/15/25 08:54
Comments:								

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-5 Matrix WW Sub Lab ID: 280-212807-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Acenaphthylene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[a]anthracene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[b]fluoranthene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[k]fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[a]pyrene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26
Chrysene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Dibenz(a,h)anthracene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Fluoranthene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Fluorene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Indeno[1,2,3-cd]pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Naphthalene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Phenanthrene	ND	ug/L	4	1		1		625.1	Eurofins Denver	9/5/25 19:26
Pyrene	ND	ug/L	10	4		1		625.1	Eurofins Denver	9/5/25 19:26
Benzo[g,h,i]perylene	ND	ug/L	4	2		1		625.1	Eurofins Denver	9/5/25 19:26

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-6 Matrix WW Sub Lab ID: 280-212807-11

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 8:18
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:18

Comments:

Sample Location: SWM 12-02 SPID: Collection Date/Time: 08/28/2025 10:50

FCID:

AWL ID/ Fraction: AWL-25-02596-011-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:53
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:53

Comments:

Sample Location: SWM 12-02 Dup Collection Date/Time: 08/28/2025 11:05

AWL ID/ Fraction: AWL-25-02596-012-1 Matrix WW Batch ID: 082925-01-BOD

Analyte	Result	Units	MRL	MDL	MCL	Flags	DF	Method	Analyst	Analysis Date/Time
BOD	5.08	mg/L	2	0.6			2	SM5210B	SMK	08/29/25 14:55

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-1 Matrix WW Batch ID: 090225-01-TSS

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
TSS	20.75	mg/L	27.82	12.5		2.5	J	SM2540D	BKC	9/2/25 15:02

Comments:

Sample Location: SWM 12-02 Dup Collection Date/Time: 08/28/2025 11:05

AWL ID/ Fraction: AWL-25-02596-012-2 Matrix WW Batch ID: 082825-02-FC

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Date/Time	Analyst Initials
Fecal Coliform	15363.64	CFU/100mL	90.91			90.91	SM9222D Fecal by MF	08/28/25 15:51	SMK

Comments: Macro colonies. Competing bacteria. SMK 08/29/25

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-3 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Copper	3.4	ug/L	2	1		1		200.8	Eurofins Denver	9/10/25 11:58

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-4 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Calcium	24000	ug/L	200	60		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 19:18
Magnesium	6300	ug/L	200	50		1		200.7 Rev 4.4	Eurofins Denver	9/4/25 19:18

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-4 Matrix WW Batch ID: 091525-02-Hardness

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Hardness	85.87	mg/L CaCO3	0.03	0.01		1		SM2340B Hardness	BKC	9/15/25 08:55

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-5 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
Acenaphthene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Acenaphthylene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Anthracene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[a]anthracene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[b]fluoranthene	ND	ug/L	3.9	2		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[k]fluoranthene	ND	ug/L	3.9	0.98		1		625.1	Eurofins Denver	9/5/25 20:32
Benzo[a]pyrene	ND	ug/L	3.9	2		1		625.1	Eurofins Denver	9/5/25 20:32

Chrysene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Dibenz(a,h)anthracene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Fluoranthene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Fluorene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Indeno[1,2,3-cd]pyrene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Naphthalene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Phenanthrene	ND	ug/L	3.9	0.98	1	625.1	Eurofins Denver	9/5/25 20:32
Pyrene	ND	ug/L	9.8	3.9	1	625.1	Eurofins Denver	9/5/25 20:32
Benzo[g,h,i]perylene	ND	ug/L	3.9	2	1	625.1	Eurofins Denver	9/5/25 20:32

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time: 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-6 Matrix WW Sub Lab ID: 280-212807-12

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 8:39
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 8:39

Comments:

Sample Location: SWM 12-02 Dup SPID: Collection Date/Time 08/28/2025 11:05

FCID:

AWL ID/ Fraction: AWL-25-02596-012-6 Matrix WW Batch ID: 091625-01-TAqH

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)	<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:54
Total Aromatic Hydrocarbons (TAH)	<1	ug/L	1	1		1	U	Calculation	AKS	09/16/2025 09:54

Comments:

Sample Location: SWM Trip Blank -02 SPID: Collection Date/Time: 08/28/2025 08:03

FCID:

AWL ID/ Fraction: AWL-25-02596-013-1 Matrix AQ Sub Lab ID: 280-212807-13

Analyte	Result	Units	MRL	MDL	MCL	DF	Flags	Method	Sub Lab	Analysis Date/Time
1,2-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
1,3-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
1,4-Dichlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Benzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Ethylbenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Toluene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Total BTEX	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31
Xylenes, Total	ND	ug/L	1	0.25	10 mg/L	1		624.1	Eurofins Denver	9/8/25 6:31
Chlorobenzene	ND	ug/L	1	0.25		1		624.1	Eurofins Denver	9/8/25 6:31

Comments:

Sample Location: SWM Trip Blank -02 SPID: Collection Date/Time 08/28/2025 08:03

AWL ID/ Fraction:		AWL-25-02596-013-1		FCID:				Batch ID:		091625-01-TAqH	
Matrix		AQ		MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Analyte		Result	Units	MRL	MDL	MCL	DF	Flags	Method	Analyst	Analysis Date/Time
Total Aqueous Aromatic Hydrocarbons (TAqH)		<10	ug/L	10	10		1	U	Calculation	AKS	09/16/2025 09:55
Total Aromatic Hydrocarbons (TAH)		NA	ug/L	1	1		1		Calculation	NA	NA
Comments:											

**Alaska Laboratory #AK01000**

**Analysis QC**

**BOD SM 5210B**

**Batch ID 082925-01-BOD**

**Method Blank**

Analyte	MB	Flags	MDL	MRL	CRDL	Analyst	Date/Time
BOD	0.12		0.3	0.9		SMK	08/29/25 14:55

**LCS**

Analyte	LCS	Flags	Spike Amount	Percent Recovery	Limits	Analyst	Date/Time
BOD	197.25		210.8	93.57	85-115	SMK	08/29/25 14:55

**Sample Duplicate**

**Parent ID**

AWL-25-02596-011-1

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
BOD	5.41		6.37	16.3	≤30	SMK	08/29/25 14:55

**Total Suspended Solids SM2540D**

**Batch ID: 090225-01-TSS**

**Method Blank**

Analyte	MB	Flags	MDL	MRL	CRDL	Analyst	Date/Time
Total Suspended Solids	-0.10		5.00	11.13		BKC	9/2/25 15:02

**LCS**

Analyte	LCS	Flags	Spike amount	Percent Recovery	Limits	Analyst	Date/Time
Total Suspended Solids	44.00		47.40	92.83	90-110	BKC	9/2/25 15:02

**Sample Duplicate**

**Parent ID:**

AWL-25-02593-001

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
Total Suspended Solids	20.40		18.00	12.5	≤20	BKC	9/2/25 15:02

**Sample Duplicate 2**

**Parent ID:**

N/A

Analyte	Sample Duplicate	Flags	Parent Sample	RPD	Limits	Analyst	Date/Time
Total Suspended Solids	N/A		N/A	#VALUE!	≤20	N/A	N/A



AWL-25- 02596

<b>Client/Company Name &amp; Address:</b> HDR Inc. 582 E. 36th Ave. Suite 500 Anchorage, AK 99503-4169 Contact Person: Cindy Helmericks Phone No: 907.644.2017 (o)   907.231.9305 (c) Fax No: --- E-mail: Cynthia.Helmericks@hdrinc.com		<b>Public Water System (PWS) ID:</b> Non PWS <b>Project Name/ID:</b> Storm Event #2 <b>Turnaround Time (TAT) for Results:</b> Expedited (prior authorization required) <input checked="" type="checkbox"/> Standard		<b>Requested Date for Results:</b> Results to STATE: Yes <input type="checkbox"/> No <input type="checkbox"/>		<b>Requested Analysis/Method</b> EPA 200.8/2340B - Total Hardness: HNO3 EPA 625 SIM - TAqH EPA 624 - TAH Preservative: HCl Comments	
<b>Quote Number</b> Account #: Invoice Contact Name & Address & Phone: HDR Inc. ATTN: Calley Hall 582 E. 36th Ave. Suite 500, Anchorage, AK 99503-4169 calley.hall@hdrinc.com 907-644-2123		<b>AWL Staff</b> Quote Number Account #: Invoice Contact Name & Address & Phone: HDR Inc. ATTN: Calley Hall 582 E. 36th Ave. Suite 500, Anchorage, AK 99503-4169 calley.hall@hdrinc.com 907-644-2123		<b>Requested Analysis/Method</b> EPA 200.8/2340B - Total Hardness: HNO3 EPA 625 SIM - TAqH EPA 624 - TAH Preservative: HCl Comments		<b>PO/Contract No.:</b> 10427839, Task 1-0	
<b>Kit Preparation/Shipping Charge:</b>		<b>Client Sample Identification</b> (Name, Designation, Location, etc.)		<b>Requested Analysis/Method</b> EPA 200.8/2340B - Total Hardness: HNO3 EPA 625 SIM - TAqH EPA 624 - TAH Preservative: HCl Comments		<b>Requested Analysis/Method</b> EPA 200.8/2340B - Total Hardness: HNO3 EPA 625 SIM - TAqH EPA 624 - TAH Preservative: HCl Comments	
SWM 03-02 SWM 04-02 SWM 05-02 SWM 06-02 SWM 07-02 SWM 08-02 SWM 08-02 Dup SWM 09A-02 SWM 10-02 SWM 11-02		Date Sampled Time Sampled Matrix (DW, WW, SO) No. of Containers		2540B - Total Suspended Solids 9222D - Fecal Coliform Preserv.: Na2SO4 200.8 - Dissolved Cu (Lab Filter)		PO/Contract No.	
Relinquished by: Margaret Zhu Date: 8/28/25 Time: 13:47		Received by: MOC Date: 8-28-25 Time: 13:47		Section To Be Completed by AWL Custody Seal (circle): Intact Temperature on arrival: See Below °C Temp: 78 Ice: Frozen Wet		Broken Recv Notes: No VOA Bubbles call Hardware #2 o/cu Filtered & preserved @ 7.4 C 136.4	
Relinquished by: Margaret Zhu Date: 8/28/2025 Time: 08:03AM		Received by: Chris Keil Date: 8/28/2025 Time: 08:03AM		Delivery Method (Circle): Courier USPS/Mail Hand		Thermo ID: 136A Delivery Method (Circle): Courier USPS/Mail Hand	
Name of Sampler: (printed) Margaret Zhu		Name of Sampler: (printed) Chris Keil		Name of Sampler: (printed) Margaret Zhu		Name of Sampler: (printed) Chris Keil	

(Dark Blue #1 11.5 C 136.4) (Dark Blue #2 7.4 C 136.4)  
 (Teal Blue #3 7.4 C 136.4)  
 (see v07 4.3 C 136.4)  
 SWM 07-02 Time sampled: 08:03AM  
 8/28/2025 MZ





# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ms. Mary Curry  
Alaska Water Laboratories  
281 North Main Street  
Suite 101  
Wasilla, Alaska 99654

Generated 9/12/2025 11:35:07 AM

## JOB DESCRIPTION

AWL-25-02596

## JOB NUMBER

280-212807-1

# Eurofins Denver

## 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 TestAmerica Project Manager.

## Authorization



Generated  
9/12/2025 11:35:07 AM

Authorized for release by  
Dylan Bieniulis, Project Manager I  
[Dylan.Bieniulis@et.eurofinsus.com](mailto:Dylan.Bieniulis@et.eurofinsus.com)  
(303)736-0138



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	6
Method Summary . . . . .	8
Sample Summary . . . . .	9
Client Sample Results . . . . .	10
Surrogate Summary . . . . .	19
QC Sample Results . . . . .	20
QC Association . . . . .	27
Chronicle . . . . .	30
Certification Summary . . . . .	34
Chain of Custody . . . . .	35
Receipt Checklists . . . . .	38

# Definitions/Glossary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Case Narrative

Client: Alaska Water Laboratories  
Project: AWL-25-02596

Job ID: 280-212807-1

**Job ID: 280-212807-1**

**Eurofins Denver**

## Job Narrative 280-212807-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 9/3/2025 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

### Method 624.1 - Volatile Organic Compounds (GC/MS)

Samples AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5), AWL-25-02596-008 (280-212807-8), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD), AWL-25-02596-012 (280-212807-12) and AWL-25-02596-013 (280-212807-13) were analyzed for Volatile Organic Compounds (GC/MS). The samples were analyzed on 9/5/2025 and 9/8/2025.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-712089. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. The associated samples are: AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5) and AWL-25-02596-008 (280-212807-8).

### Method 625.1 - Semivolatile Organic Compounds (GC/MS)

Samples AWL-25-02596-003 (280-212807-3), AWL-25-02596-005 (280-212807-5), AWL-25-02596-008 (280-212807-8), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Semivolatile Organic Compounds (GC/MS). The samples were prepared on 9/4/2025 and analyzed on 9/5/2025.

### Method 200.7 Rev 4.4 - Metals (ICP)

Samples AWL-25-02596-001 (280-212807-1), AWL-25-02596-002 (280-212807-2), AWL-25-02596-003 (280-212807-3), AWL-25-02596-004 (280-212807-4), AWL-25-02596-005 (280-212807-5), AWL-25-02596-006 (280-212807-6), AWL-25-02596-007 (280-212807-7), AWL-25-02596-008 (280-212807-8), AWL-25-02596-009 (280-212807-9), AWL-25-02596-010 (280-212807-10), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Metals (ICP). The samples were prepared on 9/3/2025 and analyzed on 9/4/2025.

### Method 200.8 - Metals (ICP/MS) - Dissolved

Samples AWL-25-02596-001 (280-212807-1), AWL-25-02596-002 (280-212807-2), AWL-25-02596-003 (280-212807-3), AWL-25-02596-004 (280-212807-4), AWL-25-02596-005 (280-212807-5), AWL-25-02596-006 (280-212807-6), AWL-25-02596-007 (280-212807-7), AWL-25-02596-008 (280-212807-8), AWL-25-02596-009 (280-212807-9), AWL-25-02596-010 (280-212807-10), AWL-25-02596-011 (280-212807-11), AWL-25-02596-011 (280-212807-11MS), AWL-25-02596-011 (280-212807-11MSD) and AWL-25-02596-012 (280-212807-12) were analyzed for Metals (ICP/MS) - Dissolved. The samples were prepared on 9/3/2025 and analyzed on 9/10/2025 and 9/11/2025.

Eurofins Denver

# Detection Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Client Sample ID: AWL-25-02596-001

## Lab Sample ID: 280-212807-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	18000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6600		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.4	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-002

## Lab Sample ID: 280-212807-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	23000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6100		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.9		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-003

## Lab Sample ID: 280-212807-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	17000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2600		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.9		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-004

## Lab Sample ID: 280-212807-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	6900		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1700		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.7	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-005

## Lab Sample ID: 280-212807-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	3400		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	1300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.3		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-006

## Lab Sample ID: 280-212807-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	4200		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	970		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.6	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-007

## Lab Sample ID: 280-212807-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	4800		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	990		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.7	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-008

## Lab Sample ID: 280-212807-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	21000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	3400		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.4	J	2.0	1.0	ug/L	1		200.8	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Denver

# Detection Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Client Sample ID: AWL-25-02596-009

## Lab Sample ID: 280-212807-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	22000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	5800		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	1.9	J	2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-010

## Lab Sample ID: 280-212807-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	17000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	2200		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	2.5		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-011

## Lab Sample ID: 280-212807-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	24000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.4		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-012

## Lab Sample ID: 280-212807-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	24000		200	60	ug/L	1		200.7 Rev 4.4	Total/NA
Magnesium	6300		200	50	ug/L	1		200.7 Rev 4.4	Total/NA
Copper	3.4		2.0	1.0	ug/L	1		200.8	Dissolved

## Client Sample ID: AWL-25-02596-013

## Lab Sample ID: 280-212807-13

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Denver

# Method Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

Method	Method Description	Protocol	Laboratory
624.1	Volatile Organic Compounds (GC/MS)	EPA	EET DEN
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET DEN
200.7 Rev 4.4	Metals (ICP)	EPA	EET DEN
200.8	Metals (ICP/MS)	EPA	EET DEN
200.7	Preparation, Total Metals	EPA	EET DEN
200.8	Preparation, Total Recoverable Metals	EPA	EET DEN
625	Liquid-Liquid Extraction	EPA	EET DEN

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



# Sample Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
280-212807-1	AWL-25-02596-001	Water	08/28/25 11:33	09/03/25 09:55	Alaska
280-212807-2	AWL-25-02596-002	Water	08/28/25 11:43	09/03/25 09:55	Alaska
280-212807-3	AWL-25-02596-003	Water	08/28/25 10:25	09/03/25 09:55	Alaska
280-212807-4	AWL-25-02596-004	Water	08/28/25 09:48	09/03/25 09:55	Alaska
280-212807-5	AWL-25-02596-005	Water	08/28/25 08:03	09/03/25 09:55	Alaska
280-212807-6	AWL-25-02596-006	Water	08/28/25 08:18	09/03/25 09:55	Alaska
280-212807-7	AWL-25-02596-007	Water	08/28/25 08:28	09/03/25 09:55	Alaska
280-212807-8	AWL-25-02596-008	Water	08/28/25 09:20	09/03/25 09:55	Alaska
280-212807-9	AWL-25-02596-009	Water	08/28/25 08:58	09/03/25 09:55	Alaska
280-212807-10	AWL-25-02596-010	Water	08/28/25 12:15	09/03/25 09:55	Alaska
280-212807-11	AWL-25-02596-011	Water	08/28/25 10:50	09/03/25 09:55	Alaska
280-212807-12	AWL-25-02596-012	Water	08/28/25 11:05	09/03/25 09:55	Alaska
280-212807-13	AWL-25-02596-013	Water	08/28/25 08:03	09/03/25 09:55	Alaska

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-003**

**Date Collected: 08/28/25 10:25**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:16	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100		73 - 122					09/05/25 12:16	1
Toluene-d8 (Surr)	97		80 - 120					09/05/25 12:16	1
4-Bromofluorobenzene (Surr)	99		79 - 119					09/05/25 12:16	1

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:36	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	101		73 - 122					09/05/25 12:36	1
Toluene-d8 (Surr)	98		80 - 120					09/05/25 12:36	1
4-Bromofluorobenzene (Surr)	100		79 - 119					09/05/25 12:36	1

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 12:57	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 12:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	104		73 - 122					09/05/25 12:57	1
Toluene-d8 (Surr)	97		80 - 120					09/05/25 12:57	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		79 - 119		09/05/25 12:57	1

**Client Sample ID: AWL-25-02596-011**

**Date Collected: 08/28/25 10:50**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 08:18	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		73 - 122		09/08/25 08:18	1
Toluene-d8 (Surr)	105		80 - 120		09/08/25 08:18	1
4-Bromofluorobenzene (Surr)	102		79 - 119		09/08/25 08:18	1

**Client Sample ID: AWL-25-02596-012**

**Date Collected: 08/28/25 11:05**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 08:39	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 08:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		73 - 122		09/08/25 08:39	1
Toluene-d8 (Surr)	106		80 - 120		09/08/25 08:39	1
4-Bromofluorobenzene (Surr)	102		79 - 119		09/08/25 08:39	1

**Client Sample ID: AWL-25-02596-013**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 06:31	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-013**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-13**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		73 - 122					09/08/25 06:31	1
Toluene-d8 (Surr)	106		80 - 120					09/08/25 06:31	1
4-Bromofluorobenzene (Surr)	104		79 - 119					09/08/25 06:31	1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-003**

**Date Collected: 08/28/25 10:25**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Acenaphthylene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Anthracene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[a]anthracene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[b]fluoranthene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[k]fluoranthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[a]pyrene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Chrysene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Dibenz(a,h)anthracene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Fluoranthene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Fluorene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Indeno[1,2,3-cd]pyrene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Naphthalene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Phenanthrene	ND		4.3	1.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Pyrene	ND		11	4.3	ug/L		09/04/25 14:30	09/05/25 18:19	1
Benzo[g,h,i]perylene	ND		4.3	2.1	ug/L		09/04/25 14:30	09/05/25 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		22 - 120				09/04/25 14:30	09/05/25 18:19	1
2-Fluorophenol	45		23 - 120				09/04/25 14:30	09/05/25 18:19	1
2,4,6-Tribromophenol	87		41 - 134				09/04/25 14:30	09/05/25 18:19	1
Nitrobenzene-d5	67		36 - 120				09/04/25 14:30	09/05/25 18:19	1
Phenol-d5	34		15 - 120				09/04/25 14:30	09/05/25 18:19	1
Terphenyl-d14	100		54 - 127				09/04/25 14:30	09/05/25 18:19	1

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-005**

**Date Collected: 08/28/25 08:03**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 18:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	67		22 - 120				09/04/25 14:30	09/05/25 18:41	1
2-Fluorophenol	49		23 - 120				09/04/25 14:30	09/05/25 18:41	1
2,4,6-Tribromophenol	91		41 - 134				09/04/25 14:30	09/05/25 18:41	1
Nitrobenzene-d5	73		36 - 120				09/04/25 14:30	09/05/25 18:41	1
Phenol-d5	38		15 - 120				09/04/25 14:30	09/05/25 18:41	1
Terphenyl-d14	107		54 - 127				09/04/25 14:30	09/05/25 18:41	1

**Client Sample ID: AWL-25-02596-008**

**Date Collected: 08/28/25 09:20**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-8**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Acenaphthylene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Anthracene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[a]anthracene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[b]fluoranthene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[k]fluoranthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[a]pyrene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
Chrysene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Dibenz(a,h)anthracene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Fluoranthene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Fluorene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Indeno[1,2,3-cd]pyrene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Naphthalene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Phenanthrene	ND		3.8	0.94	ug/L		09/04/25 14:30	09/05/25 19:04	1
Pyrene	ND		9.4	3.8	ug/L		09/04/25 14:30	09/05/25 19:04	1
Benzo[g,h,i]perylene	ND		3.8	1.9	ug/L		09/04/25 14:30	09/05/25 19:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	69		22 - 120				09/04/25 14:30	09/05/25 19:04	1
2-Fluorophenol	49		23 - 120				09/04/25 14:30	09/05/25 19:04	1
2,4,6-Tribromophenol	95		41 - 134				09/04/25 14:30	09/05/25 19:04	1
Nitrobenzene-d5	75		36 - 120				09/04/25 14:30	09/05/25 19:04	1
Phenol-d5	34		15 - 120				09/04/25 14:30	09/05/25 19:04	1
Terphenyl-d14	105		54 - 127				09/04/25 14:30	09/05/25 19:04	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

**Client Sample ID: AWL-25-02596-011**

**Date Collected: 08/28/25 10:50**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-11**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	66		22 - 120				09/04/25 14:30	09/05/25 19:26	1
2-Fluorophenol	48		23 - 120				09/04/25 14:30	09/05/25 19:26	1
2,4,6-Tribromophenol	94		41 - 134				09/04/25 14:30	09/05/25 19:26	1
Nitrobenzene-d5	73		36 - 120				09/04/25 14:30	09/05/25 19:26	1
Phenol-d5	35		15 - 120				09/04/25 14:30	09/05/25 19:26	1
Terphenyl-d14	96		54 - 127				09/04/25 14:30	09/05/25 19:26	1

**Client Sample ID: AWL-25-02596-012**

**Date Collected: 08/28/25 11:05**

**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**

**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Acenaphthylene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Anthracene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[a]anthracene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[b]fluoranthene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[k]fluoranthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[a]pyrene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Chrysene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Dibenz(a,h)anthracene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Fluoranthene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Fluorene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Indeno[1,2,3-cd]pyrene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Naphthalene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Phenanthrene	ND		3.9	0.98	ug/L		09/04/25 14:30	09/05/25 20:32	1
Pyrene	ND		9.8	3.9	ug/L		09/04/25 14:30	09/05/25 20:32	1
Benzo[g,h,i]perylene	ND		3.9	2.0	ug/L		09/04/25 14:30	09/05/25 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		22 - 120				09/04/25 14:30	09/05/25 20:32	1
2-Fluorophenol	48		23 - 120				09/04/25 14:30	09/05/25 20:32	1
2,4,6-Tribromophenol	93		41 - 134				09/04/25 14:30	09/05/25 20:32	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Client Sample ID: AWL-25-02596-012**  
**Date Collected: 08/28/25 11:05**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-12**  
**Matrix: Water**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	73		36 - 120	09/04/25 14:30	09/05/25 20:32	1
Phenol-d5	36		15 - 120	09/04/25 14:30	09/05/25 20:32	1
Terphenyl-d14	104		54 - 127	09/04/25 14:30	09/05/25 20:32	1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP)

**Client Sample ID: AWL-25-02596-001**  
**Date Collected: 08/28/25 11:33**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	18000		200	60	ug/L		09/03/25 18:24	09/04/25 18:00	1
Magnesium	6600		200	50	ug/L		09/03/25 18:24	09/04/25 18:00	1

**Client Sample ID: AWL-25-02596-002**  
**Date Collected: 08/28/25 11:43**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	23000		200	60	ug/L		09/03/25 18:24	09/04/25 18:04	1
Magnesium	6100		200	50	ug/L		09/03/25 18:24	09/04/25 18:04	1

**Client Sample ID: AWL-25-02596-003**  
**Date Collected: 08/28/25 10:25**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	17000		200	60	ug/L		09/03/25 18:24	09/04/25 18:08	1
Magnesium	2600		200	50	ug/L		09/03/25 18:24	09/04/25 18:08	1

**Client Sample ID: AWL-25-02596-004**  
**Date Collected: 08/28/25 09:48**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-4**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	6900		200	60	ug/L		09/03/25 18:24	09/04/25 18:13	1
Magnesium	1700		200	50	ug/L		09/03/25 18:24	09/04/25 18:13	1

**Client Sample ID: AWL-25-02596-005**  
**Date Collected: 08/28/25 08:03**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-5**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	3400		200	60	ug/L		09/03/25 18:24	09/04/25 18:17	1
Magnesium	1300		200	50	ug/L		09/03/25 18:24	09/04/25 18:17	1

**Client Sample ID: AWL-25-02596-006**  
**Date Collected: 08/28/25 08:18**  
**Date Received: 09/03/25 09:55**

**Lab Sample ID: 280-212807-6**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4200		200	60	ug/L		09/03/25 18:24	09/04/25 18:21	1
Magnesium	970		200	50	ug/L		09/03/25 18:24	09/04/25 18:21	1

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Client Sample ID: AWL-25-02596-007

Date Collected: 08/28/25 08:28

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4800		200	60	ug/L		09/03/25 18:24	09/04/25 18:26	1
Magnesium	990		200	50	ug/L		09/03/25 18:24	09/04/25 18:26	1

Client Sample ID: AWL-25-02596-008

Date Collected: 08/28/25 09:20

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	21000		200	60	ug/L		09/03/25 18:24	09/04/25 18:43	1
Magnesium	3400		200	50	ug/L		09/03/25 18:24	09/04/25 18:43	1

Client Sample ID: AWL-25-02596-009

Date Collected: 08/28/25 08:58

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	22000		200	60	ug/L		09/03/25 18:24	09/04/25 18:47	1
Magnesium	5800		200	50	ug/L		09/03/25 18:24	09/04/25 18:47	1

Client Sample ID: AWL-25-02596-010

Date Collected: 08/28/25 12:15

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	17000		200	60	ug/L		09/03/25 18:24	09/04/25 18:52	1
Magnesium	2200		200	50	ug/L		09/03/25 18:24	09/04/25 18:52	1

Client Sample ID: AWL-25-02596-011

Date Collected: 08/28/25 10:50

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24000		200	60	ug/L		09/03/25 18:24	09/04/25 18:56	1
Magnesium	6300		200	50	ug/L		09/03/25 18:24	09/04/25 18:56	1

Client Sample ID: AWL-25-02596-012

Date Collected: 08/28/25 11:05

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24000		200	60	ug/L		09/03/25 18:24	09/04/25 19:18	1
Magnesium	6300		200	50	ug/L		09/03/25 18:24	09/04/25 19:18	1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02596-001

Date Collected: 08/28/25 11:33

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.4	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:28	1

Client Sample ID: AWL-25-02596-002

Date Collected: 08/28/25 11:43

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.9		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:31	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02596-003

Date Collected: 08/28/25 10:25

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.9		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:35	1

Client Sample ID: AWL-25-02596-004

Date Collected: 08/28/25 09:48

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.7	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:39	1

Client Sample ID: AWL-25-02596-005

Date Collected: 08/28/25 08:03

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.3		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:42	1

Client Sample ID: AWL-25-02596-006

Date Collected: 08/28/25 08:18

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.6	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:46	1

Client Sample ID: AWL-25-02596-007

Date Collected: 08/28/25 08:28

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.7	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:49	1

Client Sample ID: AWL-25-02596-008

Date Collected: 08/28/25 09:20

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.4	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:53	1

Client Sample ID: AWL-25-02596-009

Date Collected: 08/28/25 08:58

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	1.9	J	2.0	1.0	ug/L		09/03/25 16:44	09/10/25 09:04	1

Client Sample ID: AWL-25-02596-010

Date Collected: 08/28/25 12:15

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	2.5		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 09:07	1

Client Sample ID: AWL-25-02596-011

Date Collected: 08/28/25 10:50

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.4		2.0	1.0	ug/L		09/03/25 16:44	09/11/25 09:23	1

Eurofins Denver

# Client Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: EPA 200.8 - Metals (ICP/MS) - Dissolved

Client Sample ID: AWL-25-02596-012

Date Collected: 08/28/25 11:05

Date Received: 09/03/25 09:55

Lab Sample ID: 280-212807-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	3.4		2.0	1.0	ug/L		09/03/25 16:45	09/10/25 11:58	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Surrogate Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DCA (73-122)	TOL (80-120)	BFB (79-119)
280-212807-3	AWL-25-02596-003	100	97	99
280-212807-5	AWL-25-02596-005	101	98	100
280-212807-8	AWL-25-02596-008	104	97	101
280-212807-11	AWL-25-02596-011	99	105	102
280-212807-11 MS	AWL-25-02596-011	101	102	101
280-212807-11 MSD	AWL-25-02596-011	101	105	102
280-212807-12	AWL-25-02596-012	101	106	102
280-212807-13	AWL-25-02596-013	100	106	104
LCS 280-712089/4	Lab Control Sample	103	100	100
LCS 280-712325/4	Lab Control Sample	101	102	99
LCSD 280-712089/5	Lab Control Sample Dup	101	99	99
LCSD 280-712325/5	Lab Control Sample Dup	101	103	102
MB 280-712089/9	Method Blank	99	99	99
MB 280-712325/9	Method Blank	102	106	102

#### Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)  
TOL = Toluene-d8 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (22-120)	2FP (23-120)	TBP (41-134)	NBZ (36-120)	PHL (15-120)	TPHL (54-127)
280-212807-3	AWL-25-02596-003	63	45	87	67	34	100
280-212807-5	AWL-25-02596-005	67	49	91	73	38	107
280-212807-8	AWL-25-02596-008	69	49	95	75	34	105
280-212807-11	AWL-25-02596-011	66	48	94	73	35	96
280-212807-11 MS	AWL-25-02596-011	65	41	87	66	32	96
280-212807-11 MSD	AWL-25-02596-011	65	42	90	65	33	98
280-212807-12	AWL-25-02596-012	63	48	93	73	36	104
LCS 280-712008/2-A	Lab Control Sample	90	61	99	95	44	100
MB 280-712008/1-A	Method Blank	79	53	81	89	37	100

#### Surrogate Legend

FBP = 2-Fluorobiphenyl  
2FP = 2-Fluorophenol  
TBP = 2,4,6-Tribromophenol  
NBZ = Nitrobenzene-d5  
PHL = Phenol-d5  
TPHL = Terphenyl-d14

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 280-712089/9**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Benzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Toluene	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Total BTEX	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/05/25 09:32	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/05/25 09:32	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		73 - 122		09/05/25 09:32	1
Toluene-d8 (Surr)	99		80 - 120		09/05/25 09:32	1
4-Bromofluorobenzene (Surr)	99		79 - 119		09/05/25 09:32	1

**Lab Sample ID: LCS 280-712089/4**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	65 - 135
1,3-Dichlorobenzene	50.0	46.5		ug/L		93	70 - 130
1,4-Dichlorobenzene	50.0	45.8		ug/L		92	65 - 135
Benzene	50.0	51.6		ug/L		103	65 - 135
Ethylbenzene	50.0	50.2		ug/L		100	60 - 140
Toluene	50.0	50.9		ug/L		102	70 - 130
Total BTEX	250	253		ug/L		101	80 - 120
Xylenes, Total	100	101		ug/L		101	80 - 120
Chlorobenzene	50.0	50.0		ug/L		100	65 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		73 - 122
Toluene-d8 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		79 - 119

**Lab Sample ID: LCSD 280-712089/5**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
1,2-Dichlorobenzene	50.0	46.2		ug/L		92	65 - 135	0	30
1,3-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 130	0	30
1,4-Dichlorobenzene	50.0	45.6		ug/L		91	65 - 135	0	30
Benzene	50.0	52.0		ug/L		104	65 - 135	1	30
Ethylbenzene	50.0	49.0		ug/L		98	60 - 140	2	30
Toluene	50.0	50.8		ug/L		102	70 - 130	0	30
Total BTEX	250	251		ug/L		100	80 - 120	1	30
Xylenes, Total	100	98.7		ug/L		99	80 - 120	2	30

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 280-712089/5**  
**Matrix: Water**  
**Analysis Batch: 712089**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	50.0	49.1		ug/L		98	65 - 135	2	30
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
1,2-Dichloroethane-d4 (Surr)	101		73 - 122						
Toluene-d8 (Surr)	99		80 - 120						
4-Bromofluorobenzene (Surr)	99		79 - 119						

**Lab Sample ID: MB 280-712325/9**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
1,3-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
1,4-Dichlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Benzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Ethylbenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Toluene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Total BTEX	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Xylenes, Total	ND		1.0	0.25	ug/L			09/08/25 06:05	1
Chlorobenzene	ND		1.0	0.25	ug/L			09/08/25 06:05	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surr)	102		73 - 122				09/08/25 06:05	1	
Toluene-d8 (Surr)	106		80 - 120				09/08/25 06:05	1	
4-Bromofluorobenzene (Surr)	102		79 - 119				09/08/25 06:05	1	

**Lab Sample ID: LCS 280-712325/4**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	65 - 135
1,3-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 130
1,4-Dichlorobenzene	50.0	51.0		ug/L		102	65 - 135
Benzene	50.0	53.2		ug/L		106	65 - 135
Ethylbenzene	50.0	51.1		ug/L		102	60 - 140
Toluene	50.0	51.0		ug/L		102	70 - 130
Total BTEX	250	257		ug/L		103	80 - 120
Xylenes, Total	100	102		ug/L		102	80 - 120
Chlorobenzene	50.0	49.8		ug/L		100	65 - 135
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	101		73 - 122				
Toluene-d8 (Surr)	102		80 - 120				
4-Bromofluorobenzene (Surr)	99		79 - 119				

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 280-712325/5**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichlorobenzene	50.0	51.2		ug/L		102	65 - 135	6	30
1,3-Dichlorobenzene	50.0	51.1		ug/L		102	70 - 130	7	30
1,4-Dichlorobenzene	50.0	53.7		ug/L		107	65 - 135	5	30
Benzene	50.0	52.8		ug/L		106	65 - 135	1	30
Ethylbenzene	50.0	52.1		ug/L		104	60 - 140	2	30
Toluene	50.0	51.1		ug/L		102	70 - 130	0	30
Total BTEX	250	260		ug/L		104	80 - 120	1	30
Xylenes, Total	100	104		ug/L		104	80 - 120	2	30
Chlorobenzene	50.0	51.0		ug/L		102	65 - 135	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	101		73 - 122
Toluene-d8 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	102		79 - 119

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichlorobenzene	ND		25.0	24.5		ug/L		98	18 - 190
1,3-Dichlorobenzene	ND		25.0	24.4		ug/L		98	59 - 156
1,4-Dichlorobenzene	ND		25.0	26.2		ug/L		105	18 - 190
Benzene	ND		25.0	26.8		ug/L		107	37 - 151
Ethylbenzene	ND		25.0	26.1		ug/L		104	37 - 162
Toluene	ND		25.0	25.6		ug/L		102	47 - 150
Total BTEX	ND		125	131		ug/L		104	80 - 120
Xylenes, Total	ND		50.0	52.0		ug/L		104	80 - 120
Chlorobenzene	ND		25.0	25.4		ug/L		102	37 - 160

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	101		73 - 122
Toluene-d8 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	101		79 - 119

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712325**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dichlorobenzene	ND		25.0	26.1		ug/L		104	18 - 190	6	30
1,3-Dichlorobenzene	ND		25.0	26.1		ug/L		104	59 - 156	7	30
1,4-Dichlorobenzene	ND		25.0	27.5		ug/L		110	18 - 190	5	30
Benzene	ND		25.0	27.7		ug/L		111	37 - 151	4	30
Ethylbenzene	ND		25.0	28.0		ug/L		112	37 - 162	7	30
Toluene	ND		25.0	26.6		ug/L		106	47 - 150	4	30
Total BTEX	ND		125	137		ug/L		110	80 - 120	5	30
Xylenes, Total	ND		50.0	54.6		ug/L		109	80 - 120	5	30

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-212807-11 MSD  
Matrix: Water  
Analysis Batch: 712325

Client Sample ID: AWL-25-02596-011  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	ND		25.0	26.6		ug/L		106	37 - 160	4	30
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>MSD Limits</b>								
1,2-Dichloroethane-d4 (Surr)	101		73 - 122								
Toluene-d8 (Surr)	105		80 - 120								
4-Bromofluorobenzene (Surr)	102		79 - 119								

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-712008/1-A  
Matrix: Water  
Analysis Batch: 712240

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 712008

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Acenaphthylene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[a]anthracene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[b]fluoranthene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[k]fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[a]pyrene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Chrysene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Dibenz(a,h)anthracene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Fluoranthene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Fluorene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Indeno[1,2,3-cd]pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Naphthalene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Phenanthrene	ND		4.0	1.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Pyrene	ND		10	4.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
Benzo[g,h,i]perylene	ND		4.0	2.0	ug/L		09/04/25 14:30	09/05/25 17:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>MB Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	79		22 - 120				09/04/25 14:30	09/05/25 17:12	1
2-Fluorophenol	53		23 - 120				09/04/25 14:30	09/05/25 17:12	1
2,4,6-Tribromophenol	81		41 - 134				09/04/25 14:30	09/05/25 17:12	1
Nitrobenzene-d5	89		36 - 120				09/04/25 14:30	09/05/25 17:12	1
Phenol-d5	37		15 - 120				09/04/25 14:30	09/05/25 17:12	1
Terphenyl-d14	100		54 - 127				09/04/25 14:30	09/05/25 17:12	1

Lab Sample ID: LCS 280-712008/2-A  
Matrix: Water  
Analysis Batch: 712240

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 712008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	80.0	70.4		ug/L		88	47 - 145
Acenaphthylene	80.0	71.8		ug/L		90	33 - 145
Anthracene	80.0	77.1		ug/L		96	27 - 133
Benzo[a]anthracene	80.0	76.4		ug/L		96	33 - 143

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 280-712008/2-A**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[b]fluoranthene	80.0	81.1		ug/L		101	24 - 159
Benzo[k]fluoranthene	80.0	77.4		ug/L		97	11 - 162
Benzo[a]pyrene	80.0	77.9		ug/L		97	17 - 163
Chrysene	80.0	72.8		ug/L		91	17 - 168
Dibenz(a,h)anthracene	80.0	78.0		ug/L		98	1 - 227
Fluoranthene	80.0	76.5		ug/L		96	26 - 137
Fluorene	80.0	71.6		ug/L		90	59 - 121
Indeno[1,2,3-cd]pyrene	80.0	79.4		ug/L		99	1 - 171
Naphthalene	80.0	61.9		ug/L		77	21 - 133
Phenanthrene	80.0	75.9		ug/L		95	54 - 120
Pyrene	80.0	77.7		ug/L		97	52 - 120
Benzo[g,h,i]perylene	80.0	74.8		ug/L		94	1 - 219

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	90		22 - 120
2-Fluorophenol	61		23 - 120
2,4,6-Tribromophenol	99		41 - 134
Nitrobenzene-d5	95		36 - 120
Phenol-d5	44		15 - 120
Terphenyl-d14	100		54 - 127

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		80.0	53.4		ug/L		67	47 - 145
Acenaphthylene	ND		80.0	53.4		ug/L		67	33 - 145
Anthracene	ND		80.0	72.8		ug/L		91	27 - 133
Benzo[a]anthracene	ND		80.0	77.0		ug/L		96	33 - 143
Benzo[b]fluoranthene	ND		80.0	82.3		ug/L		103	24 - 159
Benzo[k]fluoranthene	ND		80.0	74.9		ug/L		94	11 - 162
Benzo[a]pyrene	ND		80.0	79.2		ug/L		99	17 - 163
Chrysene	ND		80.0	71.7		ug/L		90	17 - 168
Dibenz(a,h)anthracene	ND		80.0	81.6		ug/L		102	1 - 227
Fluoranthene	ND		80.0	75.5		ug/L		94	26 - 137
Fluorene	ND		80.0	58.9		ug/L		74	59 - 121
Indeno[1,2,3-cd]pyrene	ND		80.0	82.7		ug/L		103	1 - 171
Naphthalene	ND		80.0	41.5		ug/L		52	21 - 133
Phenanthrene	ND		80.0	70.5		ug/L		88	54 - 120
Pyrene	ND		80.0	77.2		ug/L		96	52 - 120
Benzo[g,h,i]perylene	ND		80.0	80.2		ug/L		100	1 - 219

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	65		22 - 120
2-Fluorophenol	41		23 - 120
2,4,6-Tribromophenol	87		41 - 134
Nitrobenzene-d5	66		36 - 120

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Surrogate	MS %Recovery	MS Qualifier	Limits
Phenol-d5	32		15 - 120
Terphenyl-d14	96		54 - 127

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712240**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 712008**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		80.0	51.4		ug/L		64	47 - 145	4	48
Acenaphthylene	ND		80.0	52.0		ug/L		65	33 - 145	3	74
Anthracene	ND		80.0	69.5		ug/L		87	27 - 133	5	66
Benzo[a]anthracene	ND		80.0	74.1		ug/L		93	33 - 143	4	53
Benzo[b]fluoranthene	ND		80.0	79.1		ug/L		99	24 - 159	4	71
Benzo[k]fluoranthene	ND		80.0	71.1		ug/L		89	11 - 162	5	63
Benzo[a]pyrene	ND		80.0	73.9		ug/L		92	17 - 163	7	72
Chrysene	ND		80.0	69.0		ug/L		86	17 - 168	4	87
Dibenz(a,h)anthracene	ND		80.0	76.3		ug/L		95	1 - 227	7	126
Fluoranthene	ND		80.0	71.3		ug/L		89	26 - 137	6	66
Fluorene	ND		80.0	59.1		ug/L		74	59 - 121	0	38
Indeno[1,2,3-cd]pyrene	ND		80.0	78.4		ug/L		98	1 - 171	5	99
Naphthalene	ND		80.0	37.8		ug/L		47	21 - 133	9	65
Phenanthrene	ND		80.0	67.5		ug/L		84	54 - 120	4	39
Pyrene	ND		80.0	75.5		ug/L		94	52 - 120	2	49
Benzo[g,h,i]perylene	ND		80.0	76.6		ug/L		96	1 - 219	5	97

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	65		22 - 120
2-Fluorophenol	42		23 - 120
2,4,6-Tribromophenol	90		41 - 134
Nitrobenzene-d5	65		36 - 120
Phenol-d5	33		15 - 120
Terphenyl-d14	98		54 - 127

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID: MB 280-711887/1-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200	60	ug/L		09/03/25 18:24	09/04/25 17:51	1
Magnesium	ND		200	50	ug/L		09/03/25 18:24	09/04/25 17:51	1

**Lab Sample ID: LCS 280-711887/2-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50000	47800		ug/L		96	85 - 115

Eurofins Denver

# QC Sample Results

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

**Lab Sample ID: LCS 280-711887/2-A**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	50000	46800		ug/L		94	85 - 115

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	24000		50000	70100		ug/L		93	75 - 125
Magnesium	6300		50000	52200		ug/L		92	75 - 125

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712150**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Total/NA**  
**Prep Batch: 711887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	24000		50000	69800		ug/L		93	75 - 125	0	20
Magnesium	6300		50000	52200		ug/L		92	75 - 125	0	20

## Method: 200.8 - Metals (ICP/MS)

**Lab Sample ID: MB 280-711870/1-A**  
**Matrix: Water**  
**Analysis Batch: 712808**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 711870**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		2.0	1.0	ug/L		09/03/25 16:44	09/10/25 08:13	1

**Lab Sample ID: LCS 280-711870/2-A**  
**Matrix: Water**  
**Analysis Batch: 712808**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 711870**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	40.0	41.8		ug/L		104	90 - 115

**Lab Sample ID: 280-212807-11 MS**  
**Matrix: Water**  
**Analysis Batch: 712931**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Dissolved**  
**Prep Batch: 711870**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	3.4		40.0	42.8		ug/L		98	90 - 115

**Lab Sample ID: 280-212807-11 MSD**  
**Matrix: Water**  
**Analysis Batch: 712931**

**Client Sample ID: AWL-25-02596-011**  
**Prep Type: Dissolved**  
**Prep Batch: 711870**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	3.4		40.0	42.5		ug/L		98	90 - 115	1	20

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## GC/MS VOA

### Analysis Batch: 712089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	624.1	
280-212807-5	AWL-25-02596-005	Total/NA	Water	624.1	
280-212807-8	AWL-25-02596-008	Total/NA	Water	624.1	
MB 280-712089/9	Method Blank	Total/NA	Water	624.1	
LCS 280-712089/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-712089/5	Lab Control Sample Dup	Total/NA	Water	624.1	

### Analysis Batch: 712325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-11	AWL-25-02596-011	Total/NA	Water	624.1	
280-212807-12	AWL-25-02596-012	Total/NA	Water	624.1	
280-212807-13	AWL-25-02596-013	Total/NA	Water	624.1	
MB 280-712325/9	Method Blank	Total/NA	Water	624.1	
LCS 280-712325/4	Lab Control Sample	Total/NA	Water	624.1	
LCSD 280-712325/5	Lab Control Sample Dup	Total/NA	Water	624.1	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	624.1	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	624.1	

## GC/MS Semi VOA

### Prep Batch: 712008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	625	
280-212807-5	AWL-25-02596-005	Total/NA	Water	625	
280-212807-8	AWL-25-02596-008	Total/NA	Water	625	
280-212807-11	AWL-25-02596-011	Total/NA	Water	625	
280-212807-12	AWL-25-02596-012	Total/NA	Water	625	
MB 280-712008/1-A	Method Blank	Total/NA	Water	625	
LCS 280-712008/2-A	Lab Control Sample	Total/NA	Water	625	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	625	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	625	

### Analysis Batch: 712240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-3	AWL-25-02596-003	Total/NA	Water	625.1	712008
280-212807-5	AWL-25-02596-005	Total/NA	Water	625.1	712008
280-212807-8	AWL-25-02596-008	Total/NA	Water	625.1	712008
280-212807-11	AWL-25-02596-011	Total/NA	Water	625.1	712008
280-212807-12	AWL-25-02596-012	Total/NA	Water	625.1	712008
MB 280-712008/1-A	Method Blank	Total/NA	Water	625.1	712008
LCS 280-712008/2-A	Lab Control Sample	Total/NA	Water	625.1	712008
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	625.1	712008
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	625.1	712008

## Metals

### Prep Batch: 711870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Dissolved	Water	200.8	
280-212807-2	AWL-25-02596-002	Dissolved	Water	200.8	
280-212807-3	AWL-25-02596-003	Dissolved	Water	200.8	
280-212807-4	AWL-25-02596-004	Dissolved	Water	200.8	

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Metals (Continued)

### Prep Batch: 711870 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-5	AWL-25-02596-005	Dissolved	Water	200.8	
280-212807-6	AWL-25-02596-006	Dissolved	Water	200.8	
280-212807-7	AWL-25-02596-007	Dissolved	Water	200.8	
280-212807-8	AWL-25-02596-008	Dissolved	Water	200.8	
280-212807-9	AWL-25-02596-009	Dissolved	Water	200.8	
280-212807-10	AWL-25-02596-010	Dissolved	Water	200.8	
280-212807-11	AWL-25-02596-011	Dissolved	Water	200.8	
280-212807-12	AWL-25-02596-012	Dissolved	Water	200.8	
MB 280-711870/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 280-711870/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
280-212807-11 MS	AWL-25-02596-011	Dissolved	Water	200.8	
280-212807-11 MSD	AWL-25-02596-011	Dissolved	Water	200.8	

### Prep Batch: 711887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Total/NA	Water	200.7	
280-212807-2	AWL-25-02596-002	Total/NA	Water	200.7	
280-212807-3	AWL-25-02596-003	Total/NA	Water	200.7	
280-212807-4	AWL-25-02596-004	Total/NA	Water	200.7	
280-212807-5	AWL-25-02596-005	Total/NA	Water	200.7	
280-212807-6	AWL-25-02596-006	Total/NA	Water	200.7	
280-212807-7	AWL-25-02596-007	Total/NA	Water	200.7	
280-212807-8	AWL-25-02596-008	Total/NA	Water	200.7	
280-212807-9	AWL-25-02596-009	Total/NA	Water	200.7	
280-212807-10	AWL-25-02596-010	Total/NA	Water	200.7	
280-212807-11	AWL-25-02596-011	Total/NA	Water	200.7	
280-212807-12	AWL-25-02596-012	Total/NA	Water	200.7	
MB 280-711887/1-A	Method Blank	Total/NA	Water	200.7	
LCS 280-711887/2-A	Lab Control Sample	Total/NA	Water	200.7	
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	200.7	
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	200.7	

### Analysis Batch: 712150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-2	AWL-25-02596-002	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-3	AWL-25-02596-003	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-4	AWL-25-02596-004	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-5	AWL-25-02596-005	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-6	AWL-25-02596-006	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-7	AWL-25-02596-007	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-8	AWL-25-02596-008	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-9	AWL-25-02596-009	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-10	AWL-25-02596-010	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-12	AWL-25-02596-012	Total/NA	Water	200.7 Rev 4.4	711887
MB 280-711887/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	711887
LCS 280-711887/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11 MS	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887
280-212807-11 MSD	AWL-25-02596-011	Total/NA	Water	200.7 Rev 4.4	711887

Eurofins Denver

# QC Association Summary

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Metals

### Analysis Batch: 712808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-1	AWL-25-02596-001	Dissolved	Water	200.8	711870
280-212807-2	AWL-25-02596-002	Dissolved	Water	200.8	711870
280-212807-3	AWL-25-02596-003	Dissolved	Water	200.8	711870
280-212807-4	AWL-25-02596-004	Dissolved	Water	200.8	711870
280-212807-5	AWL-25-02596-005	Dissolved	Water	200.8	711870
280-212807-6	AWL-25-02596-006	Dissolved	Water	200.8	711870
280-212807-7	AWL-25-02596-007	Dissolved	Water	200.8	711870
280-212807-8	AWL-25-02596-008	Dissolved	Water	200.8	711870
280-212807-9	AWL-25-02596-009	Dissolved	Water	200.8	711870
280-212807-10	AWL-25-02596-010	Dissolved	Water	200.8	711870
280-212807-12	AWL-25-02596-012	Dissolved	Water	200.8	711870
MB 280-711870/1-A	Method Blank	Total Recoverable	Water	200.8	711870
LCS 280-711870/2-A	Lab Control Sample	Total Recoverable	Water	200.8	711870

### Analysis Batch: 712931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-212807-11	AWL-25-02596-011	Dissolved	Water	200.8	711870
280-212807-11 MS	AWL-25-02596-011	Dissolved	Water	200.8	711870
280-212807-11 MSD	AWL-25-02596-011	Dissolved	Water	200.8	711870

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-001**

**Lab Sample ID: 280-212807-1**

Date Collected: 08/28/25 11:33

Matrix: Water

Date Received: 09/03/25 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:00	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:28	LMT	EET DEN

**Client Sample ID: AWL-25-02596-002**

**Lab Sample ID: 280-212807-2**

Date Collected: 08/28/25 11:43

Matrix: Water

Date Received: 09/03/25 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:04	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:31	LMT	EET DEN

**Client Sample ID: AWL-25-02596-003**

**Lab Sample ID: 280-212807-3**

Date Collected: 08/28/25 10:25

Matrix: Water

Date Received: 09/03/25 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:16	MD	EET DEN
Total/NA	Prep	625			235.2 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 18:19	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:08	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:35	LMT	EET DEN

**Client Sample ID: AWL-25-02596-004**

**Lab Sample ID: 280-212807-4**

Date Collected: 08/28/25 09:48

Matrix: Water

Date Received: 09/03/25 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:13	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:39	LMT	EET DEN

**Client Sample ID: AWL-25-02596-005**

**Lab Sample ID: 280-212807-5**

Date Collected: 08/28/25 08:03

Matrix: Water

Date Received: 09/03/25 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:36	MD	EET DEN
Total/NA	Prep	625			247.5 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 18:41	PW	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-005**

**Lab Sample ID: 280-212807-5**

**Date Collected: 08/28/25 08:03**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:17	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:42	LMT	EET DEN

**Client Sample ID: AWL-25-02596-006**

**Lab Sample ID: 280-212807-6**

**Date Collected: 08/28/25 08:18**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:21	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:46	LMT	EET DEN

**Client Sample ID: AWL-25-02596-007**

**Lab Sample ID: 280-212807-7**

**Date Collected: 08/28/25 08:28**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:26	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:49	LMT	EET DEN

**Client Sample ID: AWL-25-02596-008**

**Lab Sample ID: 280-212807-8**

**Date Collected: 08/28/25 09:20**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712089	09/05/25 12:57	MD	EET DEN
Total/NA	Prep	625			264.8 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 19:04	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:43	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 08:53	LMT	EET DEN

**Client Sample ID: AWL-25-02596-009**

**Lab Sample ID: 280-212807-9**

**Date Collected: 08/28/25 08:58**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:47	ADL	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Client Sample ID: AWL-25-02596-009**

**Lab Sample ID: 280-212807-9**

**Date Collected: 08/28/25 08:58**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 09:04	LMT	EET DEN

**Client Sample ID: AWL-25-02596-010**

**Lab Sample ID: 280-212807-10**

**Date Collected: 08/28/25 12:15**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:52	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 09:07	LMT	EET DEN

**Client Sample ID: AWL-25-02596-011**

**Lab Sample ID: 280-212807-11**

**Date Collected: 08/28/25 10:50**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 08:18	MD	EET DEN
Total/NA	Prep	625			250 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 19:26	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 18:56	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:44	SMK	EET DEN
Dissolved	Analysis	200.8		1			712931	09/11/25 09:23	LMT	EET DEN

**Client Sample ID: AWL-25-02596-012**

**Lab Sample ID: 280-212807-12**

**Date Collected: 08/28/25 11:05**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 08:39	MD	EET DEN
Total/NA	Prep	625			254 mL	1 mL	712008	09/04/25 14:30	SS	EET DEN
Total/NA	Analysis	625.1		1			712240	09/05/25 20:32	PW	EET DEN
Total/NA	Prep	200.7			50 mL	50 mL	711887	09/03/25 18:24	SMK	EET DEN
Total/NA	Analysis	200.7 Rev 4.4		1			712150	09/04/25 19:18	ADL	EET DEN
Dissolved	Prep	200.8			50 mL	50 mL	711870	09/03/25 16:45	SMK	EET DEN
Dissolved	Analysis	200.8		1			712808	09/10/25 11:58	LMT	EET DEN

**Client Sample ID: AWL-25-02596-013**

**Lab Sample ID: 280-212807-13**

**Date Collected: 08/28/25 08:03**

**Matrix: Water**

**Date Received: 09/03/25 09:55**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624.1		1	5 mL	5 mL	712325	09/08/25 06:31	MD	EET DEN

Eurofins Denver

# Lab Chronicle

Client: Alaska Water Laboratories  
Project/Site: AWL-25-02596

Job ID: 280-212807-1

**Laboratory References:**

EET DEN = Eurofins Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Accreditation/Certification Summary

Client: Alaska Water Laboratories  
 Project/Site: AWL-25-02596

Job ID: 280-212807-1

## Laboratory: Eurofins Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	18-001	11-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
200.7 Rev 4.4	200.7	Water	Calcium
200.7 Rev 4.4	200.7	Water	Magnesium
624.1		Water	Total BTEX
Oregon	NELAP	4025	01-08-26





<b>FROM:</b> Alaska Water Laboratories LLC. 281 N. Main St, STE 101 Wasilla AK 99654 Mary @AKWaterLabs.com		<b>Sub-Contracted Lab:</b> EET-Denver 4955 Yarrow St Arvada, CO 80002		
<b>Client Project Name:</b>	AWL-25-02596	<b>Certification Required:</b>	Alaska Wastewater	
<b>Requested Due Date (if not standard TAT):</b>	Standard	<b>Notes:</b> Level 2 report	Report to MDL Provide EDD	
Samples				
AWL ID	Collection Date/ Time	Analysis	Comments	Matrix
AWL-25-02596-001-3	08/28/2025 11:33	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-001-4	08/28/2025 11:33	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-002-3	08/28/2025 11:43	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-002-4	08/28/2025 11:43	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-003-3	08/28/2025 10:25	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-003-4	08/28/2025 10:25	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-003-5	08/28/2025 10:25	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-003-6	08/28/2025 10:25	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-004-3	08/28/2025 09:48	200.8	200.8: Cu Sample filtered and preserved at AWL	WW
AWL-25-02596-004-4	08/28/2025 09:48	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-005-3	08/28/2025 08:03	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-005-4	08/28/2025 08:03	200.7	200.7 Ca, Mg ; pH<2	WW

*M. [Signature]*

SEP 02 2025 09 30

*ML EETDEN 9-3-25*

*2-6°C PABUCF-0-20955*



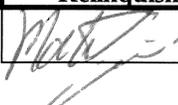
AWL-25-02596-005-5	08/28/2025 08:03	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-005-6	08/28/2025 08:03	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-006-3	08/28/2025 08:18	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-006-4	08/28/2025 08:18	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-007-3	08/28/2025 08:28	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-007-4	08/28/2025 08:28	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-008-3	08/28/2025 09:20	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-008-4	08/28/2025 09:20	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-008-5	08/28/2025 09:20	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-008-6	08/28/2025 09:20	624 TAH	EPA 624.1 TAH: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-009-3	08/28/2025 08:58	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-009-4	08/28/2025 08:58	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-010-3	08/28/2025 12:15	200.8	Dissolved 200.8: Cu Filtered and Preserved upon receipt at AWL	WW
AWL-25-02596-010-4	08/28/2025 12:15	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-011-3	08/28/2025 10:50	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL. Primary, MS/MSD - xvol sent	WW
AWL-25-02596-011-4	08/28/2025 10:50	200.7	200.7 Ca, Mg ; pH<2 Primary/MS/MSD - x vol sent	WW

*[Handwritten signature]*

SEP 02 2025 09 30

*[Handwritten signature]* EETIDEN 9-3-25  
0955



AWL-25-02596-011-5	08/28/2025 10:50	625 PAH	EPA 625.1 PAH Primary, MS/MSD - xvol sent	WW
AWL-25-02596-011-6	08/28/2025 10:50	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total Primary/MS/MSD - xvol sent	WW
AWL-25-02596-012-3	08/28/2025 11:05	200.8	Dissolved 200.8: Cu Filtered and preserved upon receipt at AWL.	WW
AWL-25-02596-012-4	08/28/2025 11:05	200.7	200.7 Ca, Mg ; pH<2	WW
AWL-25-02596-012-5	08/28/2025 11:05	625 PAH	EPA 625.1 PAH	WW
AWL-25-02596-012-6	08/28/2025 11:05	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total	WW
AWL-25-02596-013-1	08/28/2025 08:03	624 TAH	EPA 624.1 TAH: 1,2- Dichlorobenzene, 1,3- Dichlorobenzene, 1,4- Dichlorobenzene, Benzene, Chlorobenzene, Ethylbenzene, Toluene, Xylenes, Total - TRIP BLANK	AQ
<b>Relinquished By:</b>	<b>Date &amp; Time:</b>	<b>Received By:</b>	<b>Date &amp; Time:</b>	<b>Temp:</b>
	SEP 02 2025 09:30			

CoC Seal? Y / N

pH:

Ice: Frozen  
Melted / None

<b>Relinquished By:</b>	<b>Date &amp; Time:</b>	<b>Received By:</b>	<b>Date &amp; Time:</b>	<b>Temp:</b>

CoC Seal? Y / N

pH:

Ice: Frozen  
Melted / None

⊕ PAH must be extracted by

Thursday 4-4-25 (max)

M EETDEN 9-3-25  
0955

# Login Sample Receipt Checklist

Client: Alaska Water Laboratories

Job Number: 280-212807-1

**Login Number: 212807**

**List Source: Eurofins Denver**

**List Number: 1**

**Creator: Bieniulis, Dylan T**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





*This page intentionally left blank.*



# **Appendix D**

## **Field and Laboratory Data Validation**



*This page intentionally left blank.*

Data review focused on the following quality control (QC) parameters and their overall effects on the data:

- Physical parameter replicate comparisons
- Sample handling and holding time compliance
- Field replicate comparison for conventional and organic constituents
- Comparisons of laboratory controls (e.g., matrix spike/matrix spike duplicates).

## 1. Physical Parameter Comparisons

### *Precipitation*

Precipitation was measured at four project locations within the Anchorage basin using tipping bucket rain gauges. Daily rainfall data from the PANC weather station at the AIA were used to supplement the four project rain gauges.

For the 2025 sampling events, precipitation was evaluated using a rolling storm period. The study plan specifies that storm events must result in  $\geq 0.1$  inch of rainfall during the rolling storm period and be preceded by 24 hours of dry weather ( $< 0.1$  inch of rainfall). All four storm events monitored in 2025 met these criteria. Total rainfall measured across the four tipping bucket stations during each storm event ranged from 0.36 inches at Elosie Spencer during Event 1 to 0.79 inches at Elosie Spencer during Event 3. Sampling was completed within 24 hours of the start of the storm for each event. For all sampling events, precipitation recorded at the four project rain gauges during the preceding 24-hour dry period was less than 0.1 inch, with only trace precipitation ( $\leq 0.07$  inches) observed at select gauges prior to Events 2 and 4. This variability in recorded precipitation reflects well-known microclimatic differences within the Anchorage Bowl, where spatially isolated rainfall can occur even during generally dry conditions. Sampling events were triggered using data from the KTUU–Midtown mesonet station, which provides real-time storm precipitation data and is centrally located within the study corridor. Based on these data, all four storms sampled were confirmed to meet the storm event criteria outlined in the QAPP.

### *Flow Measurements*

Flow velocities were measured using a geomagnetic flow meter at most stations. Although not required by the QAPP, duplicate flow measurements were collected at SWM08 and SWM12 during all four sampling events in 2025 to evaluate measurement precision. Relative percent differences (RPDs) between duplicate flow velocity measurements ranged from 1.80 to 48.42 percent (Table 1). At SWM08, RPDs were below 20 percent for three of the four storm events, with the highest RPD (19.91 percent) observed during the third storm event. At SWM12, RPDs were below 25 percent for three of the four storm events; the highest RPD (48.42 percent) occurred during the first storm event. While several RPD values exceeded the QAPP target of 15 percent, the observed variability is consistent with the inherently dynamic and non-uniform flow conditions typical of stormwater conveyances. Overall, duplicate flow measurements demonstrated reasonable agreement given the hydraulic variability present during storm events. Flow velocity measurements were duplicated at approximately 15 percent of sampling locations during the 2025 monitoring program.



**Table 1. Field Duplicate Relative Percent Difference for Doppler Flow Measurements**

Storm Event Date	SWM08	SWM12
8/7/2025	7.00	48.42
8/28/2025	7.39	18.34
9/05/2025	19.91	8.37
9/11/2025	1.80	21.44

At station SWM07, the volumetric method was utilized to determine flow during the third sampling events due to low flow, where repeated bucket fill-time measurements were made, and the average measurement was used to calculate the flow velocity. No measurement quality objectives for this method were provided in the project QAP, as the parameter is essentially self-correcting as it includes repeated measurements. However, the coefficient of variation (CV), a percentage representing the standard deviation divided by the mean of a population, was calculated to determine variability of this measurement. Bucket measurement for the third storm event showed low CVs of  $\leq 10\%$  (Table 2), indicating good consistency between measurements.

**Table 2. Coefficients of Variation for Volume/Time Flow Measurements**

Storm Event Date	SWM07
8/7/2025	N/A
8/28/2025	N/A
9/05/2025	9.83
9/11/2025	N/A

## 2. Sample Handling and Holding Time Compliance

For most analyses, samples were taken directly from the stormwater flow into laboratory-cleaned sample bottles; for TAH samples, small “VOA” vials containing preservative were typically filled from the PAH sample bottles. For every storm event, all samples were appropriately labeled, and the chains of custody completed as prescribed in the QAP. For all storm events, samples were maintained in the coolers at  $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$  or delivered to the laboratory at ambient temperatures within a few hours of sampling, which meets EPA’s sampling preservation and holding requirements for temperature. Sample custody was maintained; samples were hand delivered directly to the laboratory by the sampling crew within hours of sample collection.

The holding times specified in the QAP (MOA 2020) were met for all parameters.

## 3. Comparisons of Field Replicate Analyses

### *Conventional Parameters*

Replicates of parameters analyzed in the field were taken as a measure of field variability/ precision, where precision was calculated as either an RPD (for dissolved oxygen {DO}) or the difference between



measurements (for pH, turbidity, temperature, and conductivity) as defined in the QAP. However, it should be noted that the precision values listed in the QAP for field instruments pertain to the precision of the instrument and are not realistic goals for natural variability of stormwater field measurements. In a high stormwater outflow situation, samples collected only a few minutes apart would be expected to show considerable variability considering that different water masses are being discharged, even though samples are being collected only minutes apart. As such, comparison of field duplicate results here, though compared to the QAP-provided precision standards, are more indicative of field variability than actual instrument precision.

Each sampling event included collection of field replicates at two stations. Field analyses included measurement of the conventional parameters of DO, pH, temperature, turbidity, and specific conductivity. Replicates were taken at a rate of 20% for these parameters, exceeding the 15% prescribed for all parameters in the QAP, and twice for all sampling days, exceeding the once/day requirement in the study plan. Table 3 provides the calculated field variability/precision for conventional parameters measured in the field.

**Table 3. Precision and Variability of Field Parameters**

Parameter	QAP Standard	8/7/2025		8/28/2025		9/5/2025		9/11/2025	
		SWM08	SWM12	SWM08	SWM12	SWM08	SWM12	SWM08	SWM12
DO	10% RPD	-	0.73	0.77	<b>15.13</b>	<b>15.54</b>	<b>12.00</b>	0.78	0.83
pH	±0.2 units	-	0.00	0.08	<b>0.57</b>	0.03	0.01	0.02	0.10
Turbidity	±1 NTU	<b>3.00</b>	<b>5.50</b>	0.90	<b>2.00</b>	0.95	<b>1.40</b>	<b>9.20</b>	<b>9.00</b>
Temperature	±0.4 °C	-	0.00	<b>0.50</b>	0.10	0.10	0.00	0.16	0.01
Conductivity	±1 µS/cm	-	0.00	<b>3.70</b>	<b>3.90</b>	<b>3.40</b>	<b>3.30</b>	<b>2.91</b>	<b>44.00</b>

Values in **bold** and **red** exceeded the measurement quality objective specified in the QAP.

Precision for field parameters was evaluated in accordance with the QAPP using relative percent difference (RPD) for dissolved oxygen (DO) and absolute differences for pH, turbidity, temperature, and conductivity. As shown in Table 3, DO met the QAPP precision criterion of 10 percent RPD for most sampling events. Exceedances of the DO precision criterion were observed during Storm 2 at SWM12 (15.13 percent) and Storm 3 at SWM07 (15.54 percent) and SWM12 (12.00 percent). All other DO duplicate results met the QAPP precision objective.

pH generally met the QAPP precision criterion of ±0.2 units; however, an exceedance was observed during Storm 2 at SWM07, where an absolute difference of 0.57 units was recorded. All other pH duplicate measurements were within the QAPP precision criterion, with absolute differences ranging from 0.00 to 0.10 units.

Temperature met the QAPP precision criterion of ±0.4 °C for most evaluated duplicate measurements. One exceedance was observed during Storm 2 at SWM12, where an absolute difference of 0.50 °C was recorded. All other temperature differences were ≤0.16 °C.

Turbidity frequently exceeded the QAPP precision criterion of ±1 NTU. Absolute differences ranged from 0.90 to 9.20 NTU, with exceedances observed during all storm events and at multiple stations. These



elevated differences reflect the high spatial and temporal variability typical of stormwater turbidity during runoff conditions.

Conductivity also frequently exceeded the QAPP precision criterion of  $\pm 1 \mu\text{S}/\text{cm}$ . Absolute differences ranged from 0.00 to 44.00  $\mu\text{S}/\text{cm}$ , with exceedances observed during Storm 2, 3, and 4. The largest difference occurred during Storm 4 at SWM12 (44.00  $\mu\text{S}/\text{cm}$ ). Variability in conductivity measurements reflects the heterogeneous nature of stormwater discharge rather than sampling or analytical anomalies. Although conductivity is not specified as a required parameter in the outfall monitoring plan, it was measured to provide additional information to support interpretation of field conditions.

**Table 4. Field Duplicate Results for Conventional Parameters**

Parameter	QAP Precision (RPD)	8/7/2025		8/28/2025		9/5/2025		9/11/2025	
		SWM08	SWM12	SWM08	SWM12	SWM08	SWM12	SWM08	SWM12
TSS	25	0.95	22.37	10.35	10.29	3.31	0.00	6.26	1.81
BOD	NA	6.47	13.75	20.65	22.53	21.72	47.04	19.24	4.50
Fecal Coliform	60	14.05	2.20	55.59	17.43	<b>70.97</b>	18.60	<b>100.95</b>	<b>64.00</b>

Values in **bold** and **red** exceeded the precision measurement quality objective specified in the QAP. \* denotes both values were not detected. – denotes that the primary samples was detected, but the second was under the MDL and unable to calculate a RPD value.

### *Dissolved Copper and Hardness*

Field replicates of dissolved copper and hardness were taken at SWM08 and SWM12. Replicates were taken at a rate of 20%, exceeding the 15% prescribed for all parameters in the QAP and the once/day requirement in the study plan. RPD results are presented in Table 5 and show variability below 20% for both parameters, with the exception of dissolved copper measured at SWM12 for the fourth storm.

**Table 5. Field Duplicate Results for Dissolved Copper and Hardness as  $\text{CaCO}_3$**

Parameter	QAP Precision (RPD)	8/7/2025		8/28/2025		9/5/2025		9/11/2025	
		SWM08	SWM12	SWM08	SWM12	SWM08	SWM12	SWM08	SWM12
Dissolved Copper	20	0.00	14.40	6.06	0.00	7.41	5.71	0.00	<b>71.60</b>
Hardness	20	2.71	4.11	10.35	0.00	0.93	0.40	1.63	0.75

Values in **bold** and **red** exceeded the precision measurement quality objective specified in the QAP.

### *Organic Parameters*

Field replicates for the TAH (BETX) and PAH constituents were obtained at SWM12 during each of the four storm events. This represents a replication rate of 25%, which exceeds the 15% prescribed in the QAP and meets the once/day requirement of the study plan.

The field precision RPDs for TAH and PAH constituents are presented in Table 6. TAH parameter concentrations were below detection limits (ND) and RPDs were not calculated.



## 4. Comparisons of Laboratory Controls

Verification analyses for laboratory parameters were conducted by Alaska Water Laboratories and the contracted lab Eurofins. All labs are certified by the EPA and the Alaska Drinking Water Program and has an approved QA/QC program. Analytical methods and testing procedures were in adherence with the QAP, standard methods, and EPA-approved protocols and guidelines.

### *Conventional Parameters*

Laboratory method blanks were analyzed for the conventional parameters biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), and copper. BOD<sub>5</sub> method blank concentrations were 0.09 mg/L during the first storm event, 0.12 mg/L during the second storm event, 0.17 mg/L during the third storm event, and 0.20 mg/L during the fourth storm event; all values were below the method detection limit (MDL). TSS method blank results ranged from -0.30 mg/L to 0.20 mg/L across the four storm events and were also below the MDL. Laboratory control samples and laboratory control sample duplicates (LCS/LCSD) for the conventional parameters were within laboratory control limits for all storm events except one. During Storm 1, the BOD<sub>5</sub> LCS recovery was below the laboratory control limits, and all associated BOD<sub>5</sub> results were qualified with the data qualifier “Q.” Data qualified with “Q” were considered usable for data evaluation purposes; however, results were interpreted with appropriate consideration of the associated laboratory quality control deviation.

**Table 6. Field Duplicate Results for TAH and PAH**

Parameter	QAP	8/7/2025	8/28/2025	9/5/2025	9/11/2025
	Precision (RPD)	SWM12	SWM12	SWM12	SWM12
<b>TAH (BETX)</b>					
Benzene	20	---	---	---	---
Ethylbenzene	20	---	---	---	---
Toluene	20	---	---	---	---
Total Xylenes	20	---	---	---	---
<b>PAH</b>					
Acenaphthene	30	---	---	---	---
Acenaphthylene	30	---	---	---	---
Anthracene	30	---	---	---	---
Benzo(a)anthracene	30	---	---	---	---
Benzo(a)pyrene	30	---	---	---	---
Benzo(b)fluoranthene	30	---	---	---	---
Benzo(g,h,i,)perylene	30	---	---	---	---
Benzo(k)fluoranthene	30	---	---	---	---
Chrysene	30	---	---	---	---
Dibenzo(a,h)anthracene	30	---	---	---	---
Fluoranthene	30	---	---	---	---
Fluorene	30	---	---	---	---
Indeno(1,2,3-cd)pyrene	30	---	---	---	---
Naphthalene	30	---	---	---	---
Phenanthrene	30	--	---	---	---
Pyrene	30	---	---	---	---

Values in **bold** and **red** exceeded the precision measurement quality objective specified in the QAP. “---”denotes non-detect values. \* denotes RPDs could not be calculated.

### *Dissolved Copper and Hardness*

Hardness is computed from magnesium and calcium so the QC for those compounds relate to the quality of the hardness results. All metals and hardness data were within QC limits for 2025.

### *Organic Parameters*

Trip blanks were collected for total aromatic hydrocarbon (TAH/BTEX) analyses to evaluate potential contamination associated with sample handling, transport, or storage. All trip blanks collected during the 2025 monitoring program were non-detect, indicating no evidence of contamination attributable to sample handling or transport.

All polycyclic aromatic hydrocarbon (PAH) analytes and total petroleum sum PAH (TPSAH) were non-detect at all sites for all storm events. For volatile aromatic hydrocarbons (BTEX), benzene, ethylbenzene, and total xylenes were non-detect at all sites and during all storm events. Toluene was non-detect at all sites and storm events except for a single estimated detection. An estimated (J-qualified) toluene concentration of 0.85 µg/L was reported at SWM07 during the first storm event. This result was qualified as “J” because the concentration was below the laboratory reporting limit. Consistent with this estimated detection, the summary parameters TAH as BTEX and total aromatic organic hydrocarbons were also reported as 0.85 µg/L for SWM07 during this event, while these parameters were non-detect for all other sites and storm events.

Method blanks for organic parameters, including both TAH and PAH, were non-detect for all four storm events, confirming the absence of laboratory-introduced contamination. Laboratory control samples and laboratory control sample duplicates (LCS/LCSD), along with matrix spikes and matrix spike duplicates (MS/MSD), were analyzed to evaluate analytical accuracy and precision. With one exception, MS/MSD percent recoveries and relative percent differences (RPDs) met the Quality Assurance Project Plan (QAPP) criteria and laboratory control limits. One matrix spike duplicate (MSD) result for naphthalene exhibited a percent recovery of 41%, which is below the QAPP lower acceptance limit; however, all corresponding naphthalene sample results were non-detect, and this deviation does not affect data usability. The MS/MSD results for organic parameters are summarized in Table 7.



**Table 7. Laboratory Precision and Accuracy for TAH and PAH**

Parameter	QAP Standard		8/7/2025		8/28/2025		9/5/2025		9/11/2025	
	Precision	Accuracy	Precision	Accuracy	Precision	Accuracy	Precision	Accuracy	Precision	Accuracy
	RPD	% Rec	RPD	% Rec	RPD	% Rec	RPD	% Rec	RPD	% Rec
<b>TAH</b>										
Benzene	20	79-120	4	102/106	4	107/111	2	98/102	1	105/106
Ethylbenzene	20	79-121	6	104/110	7	104/112	2	98/100	1	101/102
Toluene	20	80-121	4	101/105	4	102/106	0	99/97	1	102/103
Total Xylenes	20	78-122	5	103/108	5	104/109	1	98/97	1	100/101
<b>PAH</b>										
Acenaphthene	30	48-114	2	55/54	4	67/64	1	74/73	11	61/68
Acenaphthylene	30	35-121	3	52/50	3	67/65	2	71/71	9	60/66
Anthracene	30	53-119	9	91/83	5	87/83	1	79/79	5	94/94
Benzo(a)anthracene	30	59-120	12	96/85	4	96/93	1	82/82	4	99/99
Benzo(a)pyrene	30	53-120	13	92/80	7	92/92	5	83/79	2	98/98
Benzo(b)fluoranthene	30	53-126	11	98/88	4	102/99	3	84/81	6	104/104
Benzo(g,h,i,)perylene	30	44-128	13	99/87	5	100/96	5	88/84	3	101/101
Benzo(k)fluoranthene	30	54-128	11	92/82	5	94/89	5	84/79	1	95/95
Chrysene	30	57-120	12	94/83	4	89/86	1	78/77	5	94/94
Dibenzo(a,h)anthracene	30	44-131	13	102/89	7	95/95	3	85/85	2	101/101
Fluoranthene	30	58-120	13	102/90	6	94/89	1	82/82	4	97/97
Fluorene	30	50-118	11	69/59	0	74/69	2	77/76	8	79/79
Indeno(1,2,3-cd)pyrene	30	48-130	14	111/97	5	103/98	6	87/83	3	101/101
Naphthalene	30	43-114	16	<b>48/41</b>	9	52/47	5	69/65	10	47/43
Phenanthrene	30	53-115	8	90/83	4	88/84	3	79/79	8	95/85
Pyrene	30	53-121	7	87/80	2	94/84	4	81/81	6	101/101

Values in **bold** and **red** did not meet the measurement quality objectives in the QAP. – lab provided results for total xylenes during storms 1, 2, 3, and 4.

## 5. Completeness

Calculated completeness for field sample collection, field measurement, and laboratory results all well exceeded the project goal of 90%. All (100%) of the intended samples were collected for laboratory analysis. Valid field analytical measurements (DO, pH, temperature, turbidity, and conductivity) were recorded 100% of the time; no water quality data points were dismissed. Laboratory data were determined to be 100% complete, with no laboratory results deemed unacceptable or un-usable.

## 6. Conclusions

A careful review of the results confirms that the dataset generated for this project is acceptable and suitable for meeting the project goals defined in the study plan. Sampling process requirements and completeness criteria were met and holding times were achieved for all samples collected during all four storm events. Field duplicate results for select parameters occasionally fell outside QAP-specified precision criteria; however, this outcome is expected because these field duplicates represent independent field replicates that primarily reflect inherent stormwater and site variability rather than analytical precision. All trip blanks collected during the 2025 monitoring program were non-detect, indicating no evidence of contamination associated with sample handling, transport, or storage. For organic parameters, laboratory QA/QC results generally met QAP and laboratory acceptance criteria. One matrix spike duplicate (MSD) result for naphthalene exhibited a percent recovery below the QAP lower acceptance limit; however, all associated environmental naphthalene results were non-detect, and this deviation does not affect the usability of the data. A single estimated detection of toluene was reported during one storm event at one site and was qualified as “J” because it was below the laboratory reporting limit. This estimated result does not indicate an exceedance or elevated condition and does not affect overall data quality. Despite these minor and well-understood QC qualifications, evaluation of the analytical QA/QC data indicates that the project data are largely within established performance criteria and are appropriate for characterization of stormwater quality for this project.

## 7. References

MOA 2020. Monitoring, Evaluation, and Quality Assurance Plan, APDES Permit No. AKS-052558.

Prepared for Alaska Department of Environmental Conservation, Division of Water. Prepared by HDR Engineering, Inc. and Municipality of Anchorage.



*This page intentionally left blank.*



# Appendix E

## Field Logs



*This page intentionally left blank.*



## Storm Event #1



*This page intentionally left blank.*

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: <u>SWM 03</u>		DATE: <u>8/7/2025</u>		SAMPLE TIME: <u>0955</u>			
OUTFALL/NODE ID: <u>1224-1</u>		PHYSICAL LOCATION: <u>old seaward/Sylvan W.</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		<u>Flow Meter</u>			
Flow Meter	Flow Speed (ft/s): <u>1.91</u>	Water Depth (in): <u>2.0</u>		Pipe Diam (in): <u>36</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Rate (gal/s)		
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #	YSI: <u>777</u>		Turbidimeter: <u>HDL# 2</u>				
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>13.3</u>	<u>180.5</u>	<u>9.83</u>	<u>94.7</u>	<u>7.50</u>	<u>33.2</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>03</u> -01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ -01 Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>NONE</u>						
COLOR	<u>NONE</u>						
CLARITY	<u>CLEAR</u>						
FLOATABLES	<u>NONE</u>						
DEPOSITS OR STAINS	<u>NONE</u>						
SHEEN	<u>NONE</u>						
SURFACE SCUM	<u>NONE</u>						
DEBRIS	<u>NONE</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
<u>ALGAE PRESENT ON APRON</u>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: Margaret Zym

Date: 8/18/2025

Page 1 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: <u>SWM 04</u>		DATE: <u>8/7/2025</u>		SAMPLE TIME: <u>09:45</u>		
OUTFALL/NODE ID: <u>1224-2</u>		PHYSICAL LOCATION: <u>old seaward/Sylvan E.</u>				
<b>OUTFALL FLOW MEASUREMENTS</b>						
Flow Method (circle)		Bucket		<u>Flow Meter</u>		
Flow Meter		Flow Speed (ft/s): <u>0.74</u>		Water Depth (in): <u>1.2</u>		
Pipe Diam (in): <u>20</u>						
Bucket Measurements		Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	
Total Time		Rate (gal/s)				
Bucket: 1-gal 5-gal						
<b>IN SITU WATER QUALITY MEASUREMENTS</b>						
INSTRUMENT/SERIAL #		YSI: <u>TTT</u>		Turbidimeter: <u>HDR#2</u>		
Temp (°C)		SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	
MEASUREMENT		<u>15.6</u>	<u>238.6</u>	<u>9.01</u>	<u>90.2</u>	
FIELD REPLICATE		<input checked="" type="checkbox"/>				
<b>DISCRETE WATER QUALITY SAMPLES</b>						
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)					
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu
SWM <u>04</u> -01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
SWM _____ -01 Dup						
MS/MSD or Lab Dup Samples						
FIELD QC (Trip/Equip)						
Description of QC Samples:			Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>						
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS			
ODOR	<u>NONE</u>					
COLOR	<u>NONE</u>					
CLARITY	<u>CLEAR</u>					
FLOATABLES	<u>NONE</u>					
DEPOSITS OR STAINS	<u>NONE</u>					
SHEEN	<u>NONE</u>					
SURFACE SCUM	<u>NONE</u>					
DEBRIS	<u>NONE</u>					
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>						
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						

Reviewed By: Margaret Zim

Date: 8/8/2025

Page 2 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # L

STATION ID: <u>SWM 05</u>		DATE: <u>08/07/2025</u>		SAMPLE TIME: <u>0855</u>			
OUTFALL/NODE ID: <u>207-1</u>		PHYSICAL LOCATION: <u>SAVE High School</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		Flow Meter			
Flow Meter	Flow Speed (ft/s): <u>1.40</u>	Water Depth (in): <u>1.5</u>	Pipe Diam (in): <u>32</u>				
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #	YSI: <u>TTT</u>		Turbidimeter: <u>HDR#2</u>				
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>15.2</u>	<u>92.1</u>	<u>8.80</u>	<u>87.1</u>	<u>6.98</u>	<u>50.6</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>05</u> -01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ -01 Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>NONE</u>						
COLOR	<u>NONE</u>						
CLARITY	<u>CLEAR</u>						
FLOATABLES	<u>NONE</u>						
DEPOSITS OR STAINS	<u>rust</u>		<u>on apron</u>				
SHEEN	<u>NONE</u>						
SURFACE SCUM	<u>NONE</u>						
DEBRIS	<u>NONE</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
<u>STOPPED RAINING</u>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: Margaret Ann

Date: 8/8/2025

Page 3 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: <u>SWM 06</u>		DATE: <u>8/7</u> /2025		SAMPLE TIME: <u>0830</u>			
OUTFALL/NODE ID: <u>314-22</u>		PHYSICAL LOCATION: <u>Maplewood St</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		<u>Flow Meter</u>			
Flow Meter	Flow Speed (ft/s): <u>0.13</u>	Water Depth (in): <u>3.75</u>	Pipe Diam (in): <u>24</u>				
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Rate (gal/s)		
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #	YSI: <u>TTT</u>		Turbidimeter: <u>HDR #2</u>				
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>15.4</u>	<u>42.0</u>	<u>9.17</u>	<u>91.6</u>	<u>6.95</u>	<u>125</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>06</u> -01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ -01 Dup							
MS/MSD or Lab Dup Samples							
FIELD QC: (Trip/Equip)							
Description of QC Samples:				Sampler's Initials:			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>NONE</u>						
COLOR	<u>Clear</u>						
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>None</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: Margaret Nw

Date: 8/7/2025

Page 4 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: <u>SWM 07</u>		DATE: <u>8 / 7 / 2025</u>		SAMPLE TIME: <u>07:05</u>			
OUTFALL/NODE ID: <u>484-</u>		PHYSICAL LOCATION: <u>new sward (Seward Highway N.)</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket <input type="checkbox"/> <u>Flow Meter</u>					
Flow Meter	Flow Speed (ft/s): <u>1.25</u>	Water Depth (in): <u>1.5</u>		Pipe Diam (in): <u>24</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>TTT</u>		Turbidimeter: <u>HDR #2</u>			
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>15.7</u>	<u>75.6</u>	<u>8.35</u>	<u>81%</u>	<u>68.4</u>	<u>7.05</u>	<u>157</u>
FIELD REPLICATE			<u>6.85</u>				
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 07-01</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ -01 Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>NONE</u>						
COLOR	<u>Brown</u>		<u>sediment</u>				
CLARITY	<u>Clear</u>						
FLOATABLES	<u>NONE</u>						
DEPOSITS OR STAINS	<u>rust</u>		<u>in culvert</u>				
SHEEN	<u>NONE</u>						
SURFACE SCUM	<u>NONE</u>						
DEBRIS	<u>NONE</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
<u>Raining</u>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: Margaret Zhar

Date: 8/3/2025

Page 5 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: SWM <u>08</u>		DATE: <u>8 / 7</u> /2025		SAMPLE TIME: <u>0720 / 0725</u>			
OUTFALL/NODE ID: <u>807</u>		PHYSICAL LOCATION: <u>Seward Highway 9.</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		Flow Meter			
Flow Meter		Flow Speed (ft/s): <u>8.27/88</u>		Water Depth (in): <u>6</u>			
Pipe Diam (in): <u>42</u>							
Bucket Measurements		Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)		
Bucket: 1-gal 5-gal							
Total Time		Rate (gal/s)					
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>TTT</u>		Turbidimeter: <u>HDR #2</u>			
Temp (°C)		SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH		
MEASUREMENT		<u>15.3</u>	<u>69.6</u>	<u>9.45</u>	<u>94%</u>		
FIELD REPLICATE					<u>7.04</u>		
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER		SAMPLES COLLECTED (CHECK BOX)					
		FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu
SWM <u>08</u> -01		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
SWM <u>08</u> -01 Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER		TYPE/SOURCE			EXTENT - COMMENTS		
ODOR		<u>NONE</u>					
COLOR		<u>BROWN</u>			<u>sediment</u>		
CLARITY		<u>clear</u>					
FLOATABLES		<u>NONE</u>					
DEPOSITS OR STAINS		<u>NONE</u>					
SHEEN		<u>NONE</u>					
SURFACE SCUM		<u>NONE</u>					
DEBRIS		<u>NONE</u>					
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
<u>Raining</u>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: Margaret Ann

Date: 8/8/2025

Page 6 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: <u>SWM 9A</u>	DATE: <u>8 / 7 / 2025</u>	SAMPLE TIME: <u>0800</u>
OUTFALL/NODE ID: <u>499-1</u>	PHYSICAL LOCATION: <u>Ben Boeke N. Side</u>	

OUTFALL FLOW MEASUREMENTS

Flow Method (circle)	Bucket	<u>Flow Meter</u>				
Flow Meter	Flow Speed (ft/s): <u>0.80</u>	Water Depth (in): <u>5.5</u>	Pipe Diam (in): <u>24</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

IN SITU WATER QUALITY MEASUREMENTS

INSTRUMENT/SERIAL #	YSI: <u>TTT</u>	Turbidimeter: <u>HDR22</u>				
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>15.2</u>	<u>60.4</u>	<u>7.34</u>	<u>73.2</u>	<u>6.73</u>	<u>89.4</u> X
FIELD REPLICATE						

DISCRETE WATER QUALITY SAMPLES

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>09A-01</u>	<input checked="" type="checkbox"/>						
SWM _____ -01 Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			

STANDARD OBSERVATIONS

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>NONE</u>	
COLOR	<u>Brown</u>	<u>sediment</u>
CLARITY	<u>clear</u>	
FLOATABLES	<u>NONE</u>	
DEPOSITS OR STAINS	<u>iron stain on culvert</u>	
SHEEN	<u>NONE</u>	
SURFACE SCUM	<u>NONE</u>	
DEBRIS	<u>NONE</u>	

WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:

lightly raining

Photos:  Yes  No

Reviewed By: Margaret [Signature]

Date: 8/8/2025

Page 7 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: <u>SWM 10</u>		DATE: <u>8 / 7 / 2025</u>		SAMPLE TIME: <u>08:10</u>		
OUTFALL/NODE ID: <u>525-2</u>		PHYSICAL LOCATION: <u>Ben Boeke S. Side</u>				
<b>OUTFALL FLOW MEASUREMENTS</b>						
Flow Method (circle)		Bucket		<u>Flow Meter</u>		
Flow Meter	Flow Speed (ft/s): <u>3.08</u>	Water Depth (in): <u>2.0</u>	Pipe Diam (in): <u>24</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Rate (gal/s)	
Bucket: 1-gal 5-gal						
<b>IN SITU WATER QUALITY MEASUREMENTS</b>						
INSTRUMENT/SERIAL #	YSI: <u>TOT</u>	Turbidimeter: <u>HDR #2</u>				
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	
MEASUREMENT	<u>13.5</u>	<u>199.6</u>	<u>9.09</u>	<u>87.1</u>	<u>6.81</u>	
FIELD REPLICATE						
<b>DISCRETE WATER QUALITY SAMPLES</b>						
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)					
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu
SWM <u>10</u> -01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
SWM _____ -01 Dup						
MS/MSD or Lab Dup Samples						
FIELD QC (Trip/Equip)						
Description of QC Samples:				Sampler's Initials: <u>ME</u>		
<b>STANDARD OBSERVATIONS</b>						
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS			
ODOR	<u>NONE</u>					
COLOR	<u>CLEAR</u>					
CLARITY	<u>CLEAR</u>					
FLOATABLES	<u>NONE</u>					
DEPOSITS OR STAINS	<u>IRON</u>		<u>covered rock in stream bed</u>			
SHEEN	<u>NONE</u>					
SURFACE SCUM	<u>NONE</u>					
DEBRIS	<u>NONE</u>					
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>						
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						

Reviewed By: Margaret Zhu

Date: 8/8/2025

Page 8 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: SWM <u>11</u>		DATE: <u>8/7/2025</u>		SAMPLE TIME: <u>1015</u>			
OUTFALL/NODE ID: <u>348-1</u>		PHYSICAL LOCATION: <u>John's Rd / Botanical</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		Flow Meter			
Flow Meter	Flow Speed (ft/s): <u>0.1</u>		Water Depth (in): <u>3.0</u>		Pipe Diam (in): <u>36</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>TTT</u>		Turbidimeter: <u>HDR #2</u>			
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>14.4</u>	<u>90.5</u>	<u>9.33</u>	<u>91.2</u>	<u>6.96</u>	<u>220</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>11</u> -01	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ -01 Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>NONE</u>						
COLOR	<u>NONE</u>						
CLARITY	<u>CLEAR</u>						
FLOATABLES	<u>NONE</u>						
DEPOSITS OR STAINS	<u>NONE</u>						
SHEEN	<u>NONE</u>						
SURFACE SCUM	<u>NONE</u>						
DEBRIS	<u>NONE</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
<u>ALOT OF SEDIMENT</u>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: Margaret Zhm

Date: 8/8/2025

Page 9 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 1

STATION ID: <u>SWM 12</u>	DATE: <u>8/7/2025</u>	SAMPLE TIME: <u>0920/0930</u>
OUTFALL/NODE ID: <u>1454-1</u>	PHYSICAL LOCATION: <u>LYNWOOD</u>	

OUTFALL FLOW MEASUREMENTS

Flow Method (circle)	Bucket	<u>Flow Meter</u>
Flow Meter	Flow Speed (ft/s): <u>1.44/2.5</u>	Water Depth (in): <u>2.5</u>
Pipe Diam (in): <u>24</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)
	Time 3 (s)	Time 4 (s)
Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal		

IN SITU WATER QUALITY MEASUREMENTS

INSTRUMENT/SERIAL #	YSI: <u>TTT</u>	Turbidimeter: <u>HD242</u>
Temp (°C)	SpC (µS/cm)	DO (mg/L)
DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>14.4</u>	<u>210.4</u>
	<u>9.58</u>	<u>93.5</u>
	<u>7.27</u>	<u>89.6</u>
FIELD REPLICATE	<u>14.4</u>	<u>210.4</u>
	<u>9.51</u>	<u>93.0</u>
	<u>7.27</u>	<u>84.1</u>

DISCRETE WATER QUALITY SAMPLES

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>12</u> -01	<input checked="" type="checkbox"/>						
SWM <u>12</u> -01 Dup	<input checked="" type="checkbox"/>						
MS/MSD or Lab Dup Samples	<input checked="" type="checkbox"/>						
FIELD QC (Trip/Equip)					<input checked="" type="checkbox"/>		

Description of QC Samples: Field QC = Trip blanks Sampler's Initials: MZ

STANDARD OBSERVATIONS

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>NONE</u>	
COLOR	<u>NONE</u>	
CLARITY	<u>CLEAR</u>	
FLOATABLES	<u>NONE</u>	
DEPOSITS OR STAINS	<u>NONE</u>	
SHEEN	<u>NONE</u>	
SURFACE SCUM	<u>NONE</u>	
DEBRIS	<u>NONE</u>	

WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:

Photos:  Yes  No

Reviewed By: Margaret Z/m

Date: 8/8/2025

Page 10 of 10



## Storm Event #2



*This page intentionally left blank.*

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM_03</u>		DATE: <u>9/18/2025</u>		SAMPLE TIME: <u>11:33</u>			
OUTFALL/NODE ID: <u>1224-1</u>		PHYSICAL LOCATION: <u>Old Seward / Sylvan W.</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		Flow Meter <u>FA950</u>			
Flow Meter	Flow Speed (ft/s): <u>1.13</u>		Water Depth (in): <u>1.5</u>		Pipe Diam (in): <u>36</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>TTT, Pro Quatro</u>		Turbidimeter: <u>HDR #2</u>			
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>11.1</u>	<u>173.0</u>	<u>9.48</u>	<u>86.4</u>	<u>7.72</u>	<u>10.0</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM_03-02</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>CK</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>None</u>						
COLOR	<u>None</u>						
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None - see comments</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>none</u>						
DEBRIS	<u>none</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
<u>minor rust and vegetation on collar</u>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature] Date: 9/3/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: SWM 04 DATE: 8/28/2025 SAMPLE TIME: 1143

OUTFALL/NODE ID: 1224-2 PHYSICAL LOCATION: Old Seward / Sylvan E

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>(Flow Meter) FA 950</u>				
Flow Meter	Flow Speed (ft/s): <u>0.49</u>	Water Depth (in): <u>0.25</u>	Pipe Diam (in): <u>20</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>TTT, Pro Quatro</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>14.1</u>	<u>275.1</u>	<u>8.27</u>	<u>79.1</u>	<u>7.60</u>	<u>13.3</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>04-02</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: CK

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Photos:  Yes  No

Reviewed By: [Signature] Date: 9/3/25

Page 2 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM 05</u>	DATE: <u>8/28/2025</u>	SAMPLE TIME: <u>10:25</u>
OUTFALL/NODE ID: <u>207-1</u>	PHYSICAL LOCATION: <u>SAVE High School</u>	

OUTFALL FLOW MEASUREMENTS

Flow Method (circle)	Bucket	<u>Flow Meter</u> <u>FA 950</u>				
Flow Meter	Flow Speed (ft/s): <u>1.39</u>	Water Depth (in): <u>0.5</u>		Pipe Diam (in): <u>32</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

IN SITU WATER QUALITY MEASUREMENTS

INSTRUMENT/SERIAL #	<u>YSI: Pro Quatro, TTT</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>13.2</u>	<u>145.1</u>	<u>7.08</u>	<u>68.1</u>	<u>7.01</u>	<u>27.8</u>
FIELD REPLICATE						

DISCRETE WATER QUALITY SAMPLES

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 05-02</u>	<input checked="" type="checkbox"/>						
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: MZ

STANDARD OBSERVATIONS

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	<u>Vegetation growing on collar</u>

WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS

Outfall in good condition

Photos  Yes  No

Reviewed By: [Signature] Date: 9/3/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM 06</u>	DATE: <u>8/28/2025</u>	SAMPLE TIME: <u>9:48</u>
OUTFALL/NODE ID: <u>314-22</u>	PHYSICAL LOCATION: <u>Maplewood St.</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	Flow Meter <u>FH950</u>				
Flow Meter	Flow Speed (ft/s): <u>0.38</u>	Water Depth (in): <u>0.5</u>		Pipe Diam (in): <u>24</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>TTC Pro Quatro</u>			Turbidimeter: <u>HDR 112</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>12.6</u>	<u>67.0</u>	<u>7.85</u>	<u>73.8</u>	<u>6.92</u>	<u>11.4</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 06-02</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>minor leaf litter buildup</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

completely corroded.

Photos: Yes No

Reviewed By: [Signature] Date: 9/3/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM 07</u>	DATE: <u>8 / 28 / 2025</u>	SAMPLE TIME: <u>8:03</u>
OUTFALL/NODE ID: <u>484 -1</u>	PHYSICAL LOCATION: <u>Seward Highway N.</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter FH950</u>				
Flow Meter	Flow Speed (ft/s): <u>1.54</u>	Water Depth (in): <u>1.5</u>		Pipe Diam (in): <u>24</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	<u>YSI: Pitt Rental YSI Pro Quatro</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>13.1</u>	<u>60.0</u>	<u>8.94</u>	<u>85.2</u>	<u>6.51</u>	<u>102</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 07-02</u>	<input checked="" type="checkbox"/>						
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: MZ

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>Slightly brown</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Photos:  Yes  No

Reviewed By: [Signature]

Date: 9/3/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM 08</u>		DATE: <u>8/28/2025</u>		SAMPLE TIME: <u>8:18 / 8:28 Dup</u>			
OUTFALL/NODE ID: <u>86-1</u>		PHYSICAL LOCATION: <u>Seward Highway S.</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		Flow Meter			<u>FH950</u>
Flow Meter		Flow Speed (ft/s): <u>7.86/7.30</u>		Water Depth (in): <u>2.5</u>		Pipe Diam (in): <u>42</u>	
Bucket Measurements		Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>TTT Rental</u>			Turbidimeter: <u>TTT Rental</u>		
MEASUREMENT		Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
FIELD REPLICATE		<u>12.8</u>	<u>49.5</u>	<u>7.83</u>	<u>74.0</u>	<u>6.73</u>	<u>33.8</u>
		<u>12.8</u>	<u>53.2</u>	<u>7.77</u>	<u>73.5</u>	<u>6.81</u>	<u>32.9</u>
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 08-02</u>	X	X	X			X	X
<u>SWM 08-02 Dup</u>	X	X	X			X	X
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE			EXTENT - COMMENTS			
ODOR	<u>None</u>						
COLOR	<u>Slightly brown</u>						
CLARITY	<u>Murky</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>None</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature] Date: 9/3/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM 09A</u>		DATE: <u>8 / 28 / 2025</u>		SAMPLE TIME: <u>0920</u>			
OUTFALL/NODE ID: <u>499-1</u>		PHYSICAL LOCATION: <u>Ben Boeke N. Side</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		Flow Meter <u>FA950</u>			
Flow Meter	Flow Speed (ft/s): <u>0.64</u>	Water Depth (in): <u>4.5</u>		Pipe Diam (in): <u>24</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>Pro Quatro, TTT</u>		Turbidimeter: <u>HDR #2</u>			
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>12.7</u>	<u>93.7</u>	<u>7.40</u>	<u>69.7</u>	<u>6.64</u>	<u>32.3</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 09A-02</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>Yes - rust</u>						
COLOR	<u>None</u>						
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>Minor leaf litter build up on grate</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
<u>Grate has minor rust; human fecal matter found adjacent to outfall; strong fecal odor.</u>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature] Date: 9/3/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM 10</u>		DATE: <u>8 / 28 / 2025</u>		SAMPLE TIME: <u>08:58</u>		
OUTFALL/NODE ID: <u>525-2</u>		PHYSICAL LOCATION: <u>Ben Boeke S. Side</u>				
<b>OUTFALL FLOW MEASUREMENTS</b>						
Flow Method (circle)		Bucket		<u>Flow Meter FH 950</u>		
Flow Meter	Flow Speed (ft/s): <u>2.63</u>		Water Depth (in): <u>1.25</u>		Pipe Diam (in): <u>24</u>	
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	
Bucket: 1-gal 5-gal						
<b>IN SITU WATER QUALITY MEASUREMENTS</b>						
INSTRUMENT/SERIAL #		YSI: <u>TTS Rental YSI Pro Quatro</u>		Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	
MEASUREMENT	<u>11.7</u>	<u>308.8</u>	<u>8.04</u>	<u>74.3</u>	<u>6.75</u>	
FIELD REPLICATE						
<b>DISCRETE WATER QUALITY SAMPLES</b>						
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)					
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu
<u>SWM 10-02</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>
<u>SWM _____ Dup</u>						
MS/MSD or Lab Dup Samples						
FIELD QC (Trip/Equip)						
Description of QC Samples:			Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>						
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS			
ODOR	<u>None</u>					
COLOR	<u>None</u>					
CLARITY	<u>Clear</u>					
FLOATABLES	<u>None</u>					
DEPOSITS OR STAINS	<u>None</u>		<u>Iron staining on rock where outfall empties onto.</u>			
SHEEN	<u>None</u>					
SURFACE SCUM	<u>None</u>					
DEBRIS	<u>None</u>					
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>						
<u>Traces of human fecal matter were found adjacent to outfall.</u>						
<u>Trash litter and clothing found adjacent to outfall.</u>						
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						

Reviewed By: [Signature]

Date: 9/3/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM 11</u>		DATE: <u>8/28/2025</u>		SAMPLE TIME: <u>12:15</u>			
OUTFALL/NODE ID: <u>1454-1</u>		PHYSICAL LOCATION: <u>Lynwood Detention Pond</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket <u>Flow Meter FH950</u>					
Flow Meter	Flow Speed (ft/s): <u>0.08</u>	Water Depth (in): <u>1.5</u>		Pipe Diam (in): <u>36</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>TTT, pro Quatro</u>		Turbidimeter: <u>HDR #2</u>			
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>13.1</u>	<u>125.2</u>	<u>8.95</u>	<u>84.8</u>	<u>7.24</u>	<u>15.1</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 11-02</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>CK</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>None</u>						
COLOR	<u>None</u>						
CLARITY	<u>clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>None</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature] Date: 9/3/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 2

STATION ID: <u>SWM 12</u>	DATE: <u>8 / 28 / 2025</u>	SAMPLE TIME: <u>10:50 / 11:05 DUP</u>
OUTFALL/NODE ID: <u>1454-1</u>	PHYSICAL LOCATION: <u>Lunwood Detention Pond</u>	

OUTFALL FLOW MEASUREMENTS

Flow Method (circle)	Bucket	<u>2.03 <del>gal</del> (Flow Meter) FH950</u>				
Flow Meter	Flow Speed (ft/s): <u>2.44</u>	Water Depth (in): <u>2.0</u>		Pipe Diam (in): <u>24</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

IN SITU WATER QUALITY MEASUREMENTS

INSTRUMENT/SERIAL #	YSI: <u>Pro Quatro, TTT</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>12.4</u>	<u>260.7</u>	<u>6.17</u>	<u>57.8</u>	<u>7.48</u>	<u>46.6</u>
FIELD REPLICATE	<u>12.3</u>	<u>264.6</u>	<u>7.18</u>	<u>67.5</u>	<u>7.49</u>	<u>48.6</u>

DISCRETE WATER QUALITY SAMPLES

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 12-02</u>	<input checked="" type="checkbox"/>						
<u>SWM 12-02 Dup</u>	<input checked="" type="checkbox"/>						
MS/MSD or Lab Dup Samples	<input checked="" type="checkbox"/>						
FIELD QC (Trip/Equip)					<input checked="" type="checkbox"/>		

Description of QC Samples: Field QC = Trip blanks (TAH) Sampler's Initials: MZ

STANDARD OBSERVATIONS

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:

Outfall in good condition

Photos:  Yes  No

Reviewed By: [Signature] Date: 9/3/25



## Storm Event #3



*This page intentionally left blank.*

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: SWM\_03      DATE: 9/3/2025      SAMPLE TIME: 10:22

OUTFALL/NODE ID: 1224-1      PHYSICAL LOCATION: Old Seward / Sylvan W.

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter</u> <u>FH950</u>				
Flow Meter	Flow Speed (ft/s): <u>1.47</u>	Water Depth (in): <u>2.0</u>	Pipe Diam (in): <u>36</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	<u>YSI: 777 / ProQuatro</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>12.3</u>	<u>184.2</u>	<u>9.34</u>	<u>87.5</u>	<u>7.51</u>	<u>4.01</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM_03-03</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

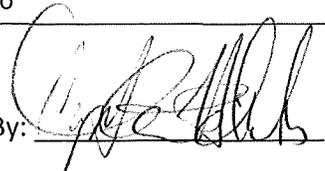
Sampler's Initials: CK

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Photos  Yes  No

Reviewed By: 

Date: 9/8/25

Page 1 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: <u>SWM 04</u>	DATE: <u>9/5/2025</u>	SAMPLE TIME: <u>1030</u>
OUTFALL/NODE ID: <u>1224-2</u>	PHYSICAL LOCATION: <u>Old Seward / Sylvan E.</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter FH950</u>				
Flow Meter	Flow Speed (ft/s): <u>0.09</u>	Water Depth (in): <u>0.5</u>		Pipe Diam (in): <u>20</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	<u>YSI: Pro Quatro / III</u>			Turbidimeter: <u>HDR #12</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>14.1</u>	<u>356.0</u>	<u>8.04</u>	<u>78.5</u>	<u>7.42</u>	<u>8.78</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 04-03</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:					Sampler's Initials: <u>ME</u>		

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Photos:  Yes  No

Reviewed By: [Signature] Date: 9/8/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: <u>SWM 05</u>	DATE: <u>9 / 5 / 2025</u>	SAMPLE TIME: <u>9:22</u>
OUTFALL/NODE ID: <u>207-1</u>	PHYSICAL LOCATION: <u>SAVE High School</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter FH950</u>				
Flow Meter	Flow Speed (ft/s): <u>2.79</u>	Water Depth (in): <u>1.5</u>	Pipe Diam (in): <u>32</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>Pro Quatro/TTT</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>13.4</u>	<u>240.8</u>	<u>8.77</u>	<u>84.1</u>	<u>7.14</u>	<u>7.88</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 05-03</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: NZ

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Vegetation build up on collar

Photos: Yes No

Reviewed By: [Signature] Date: 9/8/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: <u>SWM_0_6</u>	DATE: <u>9/5/2025</u>	SAMPLE TIME: <u>8:53</u>
OUTFALL/NODE ID: <u>314-22</u>	PHYSICAL LOCATION: <u>Maplewood st.</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	Flow Meter <u>FA950</u>				
Flow Meter	Flow Speed (ft/s): <u>0.32</u>	Water Depth (in): <u>0.5</u>		Pipe Diam (in): <u>24</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>TTT (Quatro Pro)</u>			Turbidimeter: <u>HDR # 2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>12.8</u>	<u>103.2</u>	<u>6.87</u>	<u>55.2</u>	<u>6.82</u>	<u>9.91</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM_0_6-0_3</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: CK

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

collar and outfall completely eroded

Photos:  Yes  No

Reviewed By: [Signature] Date: 9/8/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: <u>SWM_07</u>		DATE: <u>9 / 5 / 2025</u>		SAMPLE TIME: <u>7:35</u>			
OUTFALL/NODE ID: <u>484-1</u>		PHYSICAL LOCATION: <u>Seward Highway N.</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle) <u>Bucket</u>		<u>1 gal.</u>		Flow Meter <u>FH950</u>			
Flow Meter	Flow Speed (ft/s):		Water Depth (in): <u>0.25</u>	Pipe Diam (in): <u>24</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal	<u>9.52</u>	<u>10.38</u>	<u>9.37</u>	<u>9.27</u>	<u>38.54</u>	<u>0.104 gal/s</u>	
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #	YSI: <u>TTT1 Pro Quatro</u>			Turbidimeter: <u>HDR #2</u>			
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>13.7</u>	<u>62.1</u>	<u>6.76</u>	<u>65.3</u>	<u>6.7</u>	<u>15.1</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM_07-03</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>Metallc</u>						
COLOR	<u>None</u>						
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>Leaf litter + sediment</u>		<u>Minor build up</u>				
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature] Date: 9/8/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: <u>SWM 08</u>		DATE: <u>9 / 5 / 2025</u>		SAMPLE TIME: <u>7:46 / 7:52</u>			
OUTFALL/NODE ID: <u>86-1</u>		PHYSICAL LOCATION: <u>Seward Hwy S.</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		Flow Meter <u>FH950</u>			
Flow Meter		Flow Speed (ft/s): <u>3.03</u>		Water Depth (in): <u>1.75/2.5</u>		Pipe Diam (in): <u>42</u>	
Bucket Measurements		Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s) <sup>DUP</sup>	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>Pro Quatro</u>			Turbidimeter: <u>HDR #2</u>		
		Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT		<u>13.1</u>	<u>124.1</u>	<u>7.36</u>	<u>70.1</u>	<u>6.88</u>	<u>6.65</u>
FIELD REPLICATE		<u>13.0</u>	<u>128.9</u>	<u>8.60</u>	<u>79.7</u>	<u>6.91</u>	<u>7.6</u>
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 08-03</u>	X	X	X			X	X
<u>SWM 08-03 Dup</u>	X	X	X			X	X
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE			EXTENT - COMMENTS			
ODOR	<u>None</u>						
COLOR	<u>None</u>						
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>None</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
<u>Flow dup = 3.7</u>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature] Date: 9/8/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: SWM <u>9A</u>		DATE: <u>9/5</u> /2025		SAMPLE TIME: <u>08:30</u>			
OUTFALL/NODE ID: <u>499-1</u>		PHYSICAL LOCATION: <u>Ben Boeke N. Side</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		( <u>Flow Meter</u> ) <u>FH950</u>			
Flow Meter		Flow Speed (ft/s): <u>0.34</u>		Water Depth (in): <u>4.0</u>			
Pipe Diam (in): <u>24</u>							
Bucket Measurements		Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)		
Total Time		Rate (gal/s)					
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>TTT / pro quattro</u>		Turbidimeter: <u>HDR #2</u>			
Temp (°C)		SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH		
MEASUREMENT		<u>12.7</u>	<u>268.4</u>	<u>5.58</u>	<u>53.1</u>		
FIELD REPLICATE		<u>6.73</u>	<u>3.84</u>				
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>9A-03</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE			EXTENT - COMMENTS			
ODOR	<u>None</u>						
COLOR	<u>None</u>						
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>Minor trash in grate</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

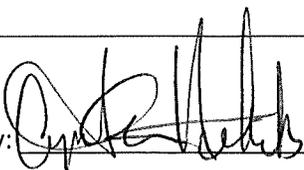
Reviewed By: [Signature]

Date: 9/8/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: <u>SWM 10</u>		DATE: <u>9.15</u> /2025		SAMPLE TIME: <u>8:20</u>				
OUTFALL/NODE ID: <u>525-2</u>		PHYSICAL LOCATION: <u>Ben Boeke S. Side</u>						
<b>OUTFALL FLOW MEASUREMENTS</b>								
Flow Method (circle)		Bucket		Flow Meter <u>FH950</u>				
Flow Meter		Flow Speed (ft/s): <u>1.19</u>		Water Depth (in): <u>1.5</u>				
Pipe Diam (in): <u>24</u>		Time 1 (s)		Time 2 (s)				
Time 3 (s)		Time 4 (s)		Total Time				
Rate (gal/s)		Bucket: 1-gal		5-gal				
<b>IN SITU WATER QUALITY MEASUREMENTS</b>								
INSTRUMENT/SERIAL #		YSI: <u>TTT / Pro Quatro</u>		Turbidimeter: <u>HPR #2</u>				
Temp (°C)		SpC (µS/cm)		DO (mg/L)				
DO (% sat)		pH		Turb (NTU)				
MEASUREMENT		<u>11.5</u>		<u>455.6</u>				
FIELD REPLICATE		<u>8.28</u>		<u>75.9</u>				
				<u>6.98</u>				
				<u>9.91</u>				
<b>DISCRETE WATER QUALITY SAMPLES</b>								
SAMPLE NUMBER		SAMPLES COLLECTED (CHECK BOX)						
		FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 10-03</u>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>SWM _____ Dup</u>								
MS/MSD or Lab Dup Samples								
FIELD QC (Trip/Equip)								
Description of QC Samples:				Sampler's Initials: <u>MZ</u>				
<b>STANDARD OBSERVATIONS</b>								
PARAMETER		TYPE/SOURCE		EXTENT - COMMENTS				
ODOR		<u>None</u>						
COLOR		<u>None</u>						
CLARITY		<u>Clear</u>						
FLOATABLES		<u>None</u>						
DEPOSITS OR STAINS		<u>Iron stains on rock below outfall</u>						
SHEEN		<u>None</u>						
SURFACE SCUM		<u>None</u>						
DEBRIS		<u>None</u>		<u>Trash on top of outfall</u>				
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>								
Photos <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No								

Reviewed By:  Date: 9/18/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: SWM <u>11</u>		DATE: <u>9 / 5 / 2025</u>		SAMPLE TIME: <u>10:59</u>			
OUTFALL/NODE ID: <u>348-1</u>		PHYSICAL LOCATION: <u>Jobs Road</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket <u>Flow Meter</u> <u>FH950</u>					
Flow Meter	Flow Speed (ft/s): <u>0.16</u>	Water Depth (in): <u>2.25</u>		Pipe Diam (in): <u>36</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)	
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #	YSI: <u>TTT / YSI pro Quattro</u>			Turbidimeter: <u>HOR #12</u>			
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)	
MEASUREMENT	<u>13.6</u>	<u>195.3</u>	<u>7.47</u>	<u>72.1</u>	<u>6.97</u>	<u>13.6</u>	
FIELD REPLICATE							
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>11-03</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>	<u>X</u>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>CK</u>			
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE		EXTENT - COMMENTS				
ODOR	<u>None</u>						
COLOR	<u>None</u>						
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>None</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature] Date: 9/8/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 3

STATION ID: SWM <u>1-2</u>		DATE: <u>9/5/2025</u>		SAMPLE TIME: <u>9:48/10:00</u>			
OUTFALL/NODE ID: <u>1454-1</u>		PHYSICAL LOCATION: <u>Lynwood Detention Pond</u>					
<b>OUTFALL FLOW MEASUREMENTS</b>							
Flow Method (circle)		Bucket		( <u>Flow Meter</u> ) <u>FH950</u>			
Flow Meter		Flow Speed (ft/s): <u>3.32/3.6</u>		Water Depth (in): <u>2.0/2.25</u>		Pipe Diam (in): <u>24</u>	
Bucket Measurements		Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal							
<b>IN SITU WATER QUALITY MEASUREMENTS</b>							
INSTRUMENT/SERIAL #		YSI: <u>Pro Quatro - III</u>			Turbidimeter: <u>HDR #2</u>		
		Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT		<u>12.8</u>	<u>315.6</u>	<u>6.50</u>	<u>61.7</u>	<u>7.46</u>	<u>12.9</u>
FIELD REPLICATE		<u>12.8</u>	<u>319.9</u>	<u>7.33</u>	<u>68.6</u>	<u>7.47</u>	<u>11.5</u>
<b>DISCRETE WATER QUALITY SAMPLES</b>							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
SWM <u>1-2-03</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
SWM <u>1-2-03</u> Dup	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
MS/MSD or Lab Dup Samples	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
FIELD QC (Trip/Equip)					<u>X</u>		
Description of QC Samples: <u>TB</u>			Sampler's Initials: <u>MZ</u>				
<b>STANDARD OBSERVATIONS</b>							
PARAMETER	TYPE/SOURCE			EXTENT - COMMENTS			
ODOR	<u>None</u>						
COLOR	<u>None</u>						
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>None</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature] Date: 9/8/25



## Storm Event #4



*This page intentionally left blank.*

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM_0_3</u>	DATE: <u>09/11/2025</u>	SAMPLE TIME: <u>10:20</u>
OUTFALL/NODE ID: <u>12247</u>	PHYSICAL LOCATION: <u>Old Seward / Sylvan W.</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter</u>				
Flow Meter	Flow Speed (ft/s): <u>1.69</u>	Water Depth (in): <u>2.5</u>	Pipe Diam (in): <u>36</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>100166 (TT/556)</u>	Turbidimeter: <u>HDR #2</u>				
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>11.33</u>	<u>160</u>	<u>11.43</u>	<u>104.2</u>	<u>6.87</u>	<u>17.3</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM_0_3_0_4</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: MZ

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>Iron stains on bottom</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Some algae growth on side of collar

Photos:  Yes  No

Reviewed By: [Signature]

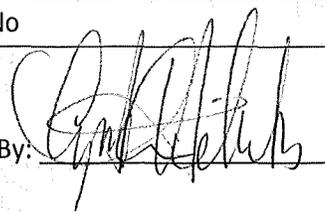
Date: 9/23/25

Page 1 of 10

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM_04</u>		DATE: <u>09/11/2025</u>		SAMPLE TIME: <u>10:15</u>				
OUTFALL/NODE ID: <u>1224-2</u>		PHYSICAL LOCATION: <u>Old Seward / Sylvan E.</u>						
<b>OUTFALL FLOW MEASUREMENTS</b>								
Flow Method (circle)		Bucket		Flow Meter				
Flow Meter		Flow Speed (ft/s): <u>0.31</u>		Water Depth (in): <u>3.75</u>				
Pipe Diam (in): <u>20</u>								
Bucket Measurements		Time 1 (s)		Time 2 (s)				
Time 3 (s)		Time 4 (s)		Total Time				
Rate (gal/s)								
Bucket: 1-gal 5-gal								
<b>IN SITU WATER QUALITY MEASUREMENTS</b>								
INSTRUMENT/SERIAL #		YSI: <u>100166 (TIT/556)</u>		Turbidimeter: <u>HDR #2</u>				
Temp (°C)		SpC (µS/cm)		DO (mg/L)				
DO (% sat)		pH		Turb (NTU)				
MEASUREMENT		<u>12.54</u>		<u>185</u>				
		<u>12.12</u>		<u>113.3</u>				
FIELD REPLICATE				<u>6.10</u>				
				<u>21.7</u>				
<b>DISCRETE WATER QUALITY SAMPLES</b>								
SAMPLE NUMBER		SAMPLES COLLECTED (CHECK BOX)						
		FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM_04-04</u>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>SWM _____ Dup</u>								
MS/MSD or Lab Dup Samples								
FIELD QC (Trip/Equip)								
Description of QC Samples:				Sampler's Initials: <u>MZ</u>				
<b>STANDARD OBSERVATIONS</b>								
PARAMETER		TYPE/SOURCE		EXTENT - COMMENTS				
ODOR		<u>None</u>						
COLOR		<u>None</u>						
CLARITY		<u>Clear</u>						
FLOATABLES		<u>None</u>						
DEPOSITS OR STAINS		<u>None</u>						
SHEEN		<u>None</u>						
SURFACE SCUM		<u>None</u>						
DEBRIS		<u>Some leaf litter at end of pipe</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>								
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No								

Reviewed By: 

Date: 9/23/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM 0 5</u>	DATE: <u>09 / 11 / 2025</u>	SAMPLE TIME: <u>09:20</u>
OUTFALL/NODE ID: <u>207-1</u>	PHYSICAL LOCATION: <u>SAVE High School</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter</u>				
Flow Meter	Flow Speed (ft/s): <u>2.73</u>	Water Depth (in): <u>3.0</u>	Pipe Diam (in): <u>32</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>100166 (TTT/556)</u>	Turbidimeter: <u>HDR #2</u>				
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>11.68</u>	<u>127</u>	<u>11.55</u>	<u>106.2</u>	<u>6.05</u>	<u>28.1</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 0 5 - 0 4</u>	<input checked="" type="checkbox"/>						
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples: \_\_\_\_\_ Sampler's Initials: MZ

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Sediment buildup on collar

Photos:  Yes  No

Reviewed By: [Signature] Date: 9/23/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM 06</u>	DATE: <u>09/11/2025</u>	SAMPLE TIME: <u>08:55</u>
OUTFALL/NODE ID: <u>314-22</u>	PHYSICAL LOCATION: <u>Maplewood St.</u>	

OUTFALL FLOW MEASUREMENTS

Flow Method (circle)	Bucket	<u>Flow Meter</u>				
Flow Meter	Flow Speed (ft/s): <u>1.01</u>	Water Depth (in): <u>2.5</u>	Pipe Diam (in): <u>24</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

IN SITU WATER QUALITY MEASUREMENTS

INSTRUMENT/SERIAL #	YSI: <u>100106 (TTT/556)</u>	Turbidimeter: <u>HDR #2</u>				
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>11.27</u>	<u>93</u>	<u>12.7</u>	<u>110.9</u>	<u>5.29</u>	<u>30.0</u>
FIELD REPLICATE						

DISCRETE WATER QUALITY SAMPLES

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 06-04</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: MZ

STANDARD OBSERVATIONS

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>Clear</u>	
CLARITY	<u>None</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>Leaf litter buildup at bottom</u>	

WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:

Collar and pipe corroded at bottom

Photos:  Yes  No

Reviewed By: [Signature]

Date: 9/23/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM 07</u>	DATE: <u>09/11/2025</u>	SAMPLE TIME: <u>07:40</u>
OUTFALL/NODE ID: <u>484-1</u>	PHYSICAL LOCATION: <u>Seward Highway N.</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter</u>				
Flow Meter	Flow Speed (ft/s): <u>3.20</u>	Water Depth (in): <u>2.5</u>	Pipe Diam (in): <u>24</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>100166 (TTT/556)</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>12.32</u>	<u>78</u>	<u>12.53</u>	<u>115.7</u>	<u>5.38</u>	<u>134</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 07-04</u>	<input checked="" type="checkbox"/>						
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: MZ

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>light brown</u>	<u>Clear w/ sediment</u>
CLARITY	<u>Clear w/ sediment</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Photos:  Yes  No

Reviewed By: [Signature]

Date: 9/23/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM_08</u> _____		DATE: <u>09 / 11 / 2025</u>		SAMPLE TIME: <u>07:50 / 07:55</u>			
OUTFALL/NODE ID: <u>8b-1</u>		PHYSICAL LOCATION: <u>Seward Highway S.</u>					
OUTFALL FLOW MEASUREMENTS							
Flow Method (circle)		Bucket		<u>Flow Meter</u>			
Flow Meter		Flow Speed (ft/s): <u>10.65/10.46</u>		Water Depth (in): <u>4.5/5.0</u>		Pipe Diam (in): <u>42</u>	
Bucket Measurements		Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal							
IN SITU WATER QUALITY MEASUREMENTS							
INSTRUMENT/SERIAL #		YSI: <u>100166 (TTT/536)</u>			Turbidimeter: <u>HDR #2</u>		
		Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT		<u>11.34</u>	<u>42</u>	<u>12.79</u>	<u>116.9</u>	<u>6.01</u>	<u>49.8</u>
FIELD REPLICATE		<u>11.34</u>	<u>38</u>	<u>12.69</u>	<u>115.8</u>	<u>6.03</u>	<u>59.0</u>
DISCRETE WATER QUALITY SAMPLES							
SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM_08-04</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>SWM_08-04 Dup</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:				Sampler's Initials: <u>MZ</u>			
STANDARD OBSERVATIONS							
PARAMETER	TYPE/SOURCE			EXTENT - COMMENTS			
ODOR	<u>None</u>						
COLOR	<u>light brown</u>			<u>Sediments</u>			
CLARITY	<u>Clear</u>						
FLOATABLES	<u>None</u>						
DEPOSITS OR STAINS	<u>None</u>						
SHEEN	<u>None</u>						
SURFACE SCUM	<u>None</u>						
DEBRIS	<u>None</u>						
WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:							
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

Reviewed By: [Signature]

Date: 9/23/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM 0 9 A</u>	DATE: <u>09/11/2025</u>	SAMPLE TIME: <u>08:25</u>
OUTFALL/NODE ID: <u>499-1</u>	PHYSICAL LOCATION: <u>Ben Boeke N. Side.</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter</u>				
Flow Meter	Flow Speed (ft/s): <u>1.25</u>	Water Depth (in): <u>5.0</u>		Pipe Diam (in): <u>24</u>		
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>100166 (TTT / 556)</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>11.26</u>	<u>85</u>	<u>13.16</u>	<u>119.2</u>	<u>5.42</u>	<u>58.8</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 0 9A-04</u>	<input checked="" type="checkbox"/>						
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							

Description of QC Samples:

Sampler's Initials: MZ

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>Some rust on crate</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>Leaf litter</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Photos:  Yes  No

Reviewed By: [Signature]

Date: 9/23/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM 10</u>		DATE: <u>09/11/2025</u>		SAMPLE TIME: <u>08:15</u>				
OUTFALL/NODE ID: <u>525-2</u>		PHYSICAL LOCATION: <u>Ben Boeke S. Side.</u>						
<b>OUTFALL FLOW MEASUREMENTS</b>								
Flow Method (circle)		Bucket		<u>Flow Meter</u>				
Flow Meter		Flow Speed (ft/s): <u>3.19</u>		Water Depth (in): <u>2.75</u>				
Pipe Diam (in): <u>24</u>								
Bucket Measurements		Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)			
Total Time		Rate (gal/s)						
Bucket: 1-gal 5-gal								
<b>IN SITU WATER QUALITY MEASUREMENTS</b>								
INSTRUMENT/SERIAL #		YSI: <u>100166 (TTT 1556)</u>		Turbidimeter: <u>HDR #2</u>				
Temp (°C)		SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH			
MEASUREMENT		<u>11.13</u>	<u>152</u>	<u>13.26</u>	<u>119.9</u>			
FIELD REPLICATE					<u>5.93</u>			
					<u>39.6</u>			
<b>DISCRETE WATER QUALITY SAMPLES</b>								
SAMPLE NUMBER		SAMPLES COLLECTED (CHECK BOX)						
		FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 10-04</u>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<u>SWM _____ Dup</u>								
MS/MSD or Lab Dup Samples								
FIELD QC (Trip/Equip)								
Description of QC Samples:				Sampler's Initials: <u>ME</u>				
<b>STANDARD OBSERVATIONS</b>								
PARAMETER		TYPE/SOURCE		EXTENT - COMMENTS				
ODOR		<u>None</u>						
COLOR		<u>None</u>						
CLARITY		<u>Clear</u>						
FLOATABLES		<u>None</u>						
DEPOSITS OR STAINS		<u>Iron stain</u>		<u>Iron oxidizing bacteria</u>				
SHEEN		<u>None</u>						
SURFACE SCUM		<u>None</u>						
DEBRIS		<u>None</u>						
<b>WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:</b>								
Photos: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No								

Reviewed By: [Signature]

Date: 9/23/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM 11</u>	DATE: <u>09/11/2025</u>	SAMPLE TIME: <u>10:50</u>
OUTFALL/NODE ID: <u>348-1</u>	PHYSICAL LOCATION: <u>John's Rd. and Botanical Cir.</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	<u>Flow Meter</u>				
Flow Meter	Flow Speed (ft/s): <u>0.16</u>	Water Depth (in): <u>4.25</u>	Pipe Diam (in): <u>36</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>100166 (TTT/556)</u>			Turbidimeter: <u>HDR #2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>12.35</u>	<u>75</u>	<u>10.83</u>	<u>101.0</u>	<u>5.76</u>	<u>31.7</u>
FIELD REPLICATE						

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM 11-04</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SWM _____ Dup							
MS/MSD or Lab Dup Samples							
FIELD QC (Trip/Equip)							
Description of QC Samples:					Sampler's Initials: <u>MZ</u>		

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>None</u>	
CLARITY	<u>Clear w/ sediment buildup</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>Lots of sediment, leaf litter</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Photos:  Yes  No

Reviewed By: [Signature] Date: 9/23/25

MOA Stormwater Management Program  
 WATER QUALITY STORM SAMPLING FIELD LOG

STORM # 4

STATION ID: <u>SWM_1_2</u>	DATE: <u>09/11/2025</u>	SAMPLE TIME: <u>09:45/09:50</u>
OUTFALL/NODE ID: <u>1454-1</u>	PHYSICAL LOCATION: <u>Lunwood Retention Pond</u>	

**OUTFALL FLOW MEASUREMENTS**

Flow Method (circle)	Bucket	Flow Meter				
Flow Meter	Flow Speed (ft/s): <u>4.08/3.29</u>	Water Depth (in): <u>4.25/4.5</u>	Pipe Diam (in): <u>24</u>			
Bucket Measurements	Time 1 (s)	Time 2 (s)	Time 3 (s)	Time 4 (s)	Total Time	Rate (gal/s)
Bucket: 1-gal 5-gal						

**IN SITU WATER QUALITY MEASUREMENTS**

INSTRUMENT/SERIAL #	YSI: <u>10066 (TTT/556)</u>			Turbidimeter: <u>HDR#2</u>		
	Temp (°C)	SpC (µS/cm)	DO (mg/L)	DO (% sat)	pH	Turb (NTU)
MEASUREMENT	<u>11.49</u>	<u>214</u>	<u>11.98</u>	<u>109.6</u>	<u>6.15</u>	<u>110</u>
FIELD REPLICATE	<u>11.50</u>	<u>154</u>	<u>12.08</u>	<u>110.3</u>	<u>6.25</u>	<u>101</u>

**DISCRETE WATER QUALITY SAMPLES**

SAMPLE NUMBER	SAMPLES COLLECTED (CHECK BOX)						
	FECAL	BOD	TSS	TAqH	TAH	Dissolved Cu	Hardness
<u>SWM_1_2_04</u>	<input checked="" type="checkbox"/>						
<u>SWM_1_2_04 Dup</u>	<input checked="" type="checkbox"/>						
MS/MSD or Lab Dup Samples	<input checked="" type="checkbox"/>						
FIELD QC (Trip/Equip)					<input checked="" type="checkbox"/>		

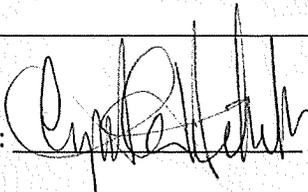
Description of QC Samples: Field QC = TB Sampler's Initials: ME

**STANDARD OBSERVATIONS**

PARAMETER	TYPE/SOURCE	EXTENT - COMMENTS
ODOR	<u>None</u>	
COLOR	<u>Clear <sup>CBH</sup> 09/11/25</u>	<u>None</u>
CLARITY	<u>Clear</u>	
FLOATABLES	<u>None</u>	
DEPOSITS OR STAINS	<u>None</u>	
SHEEN	<u>None</u>	
SURFACE SCUM	<u>None</u>	
DEBRIS	<u>None</u>	

**WEATHER - VEGETATION - OTHER UNUSUAL CONDITIONS - COMMENTS:**

Photos: Yes No

Reviewed By:  Date: 9/23/25



*This page intentionally left blank.*