THE UNIVERSITY OF NEW MEXICO

Annual Stormwater Report

December 2024| MS4 Permit # NMR04A000

The College of Nursing & Population Health Excellence construction site during the landscaping install. The downspout will direct roof rainwater to the bioswale and water surrounding plants.

Presented To:

EPA

Prepared By:

ENVIRONMENTAL HEALTH & SAFETY

EXECUTIVE SUMMARY

of UNM's Annual Stormwater Report

The University of New Mexico's (UNM) Environmental Health and Safety (EHS) department prepared this MS4 Annual Report (Report). This Report supports the requirements of the United States Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) program. Specifically, the Report is published to comply with the Middle Rio Grande (MRG) Watershed Based Municipal Separate Stormwater Sewer System Permit (MS4 Permit).[1] The Permit requires UNM to implement a program to reduce pollutants in stormwater runoff to the maximum extent practicable.

EHS administers the MS4 Program on behalf of UNM, and it consists of six Minimum Control Measures (MCMs) to comply with the provisions of the MS4 Permit:

- MCM 1 – Public Education and Outreach
- MCM 2 – Public Participation
- MCM 3 – Pollution Prevention (P2) & Good Housekeeping
- MCM 4 – Illicit Discharge Detection and Elimination (IDDE)
- MCM 5 – Management of Construction Site Runoff
- MCM 6 – Management of Post-Construction Site Runoff

Each MCM above is addressed in detail in this Report. Additionally, this Report summarizes the changes, updates, progress, and limitations of the MS4 Program for Reporting Year 2024 (RY23), or July 1, 2023 – June 30, 2024. Likewise, it addresses UNM's water quality priorities, long-term stormwater management measures, program resources, and program evaluation efforts.

UNM's Stormwater Impact

UNM is a public research university located in central Albuquerque, New Mexico, serving a faculty, staff, and student population of 33,000. The main campus is approximately 600 acres, split into three parts – North, Central, and South. Central Campus sits between Central Avenue on the south, Girard Boulevard on the east, Lomas Boulevard on the north, and University Boulevard on the west. It is home to the primary academic operations of the university. North Campus, which includes the medical and law schools, is located on the north side of Lomas Boulevard across from Central Campus. South Campus is a mile south of Central Campus, centered around University Boulevard and Avenida César Chavez. It primarily houses athletic facilities and UNM's Science and Technology Park.

UNM's MS4 serves all three campuses, which contain numerous buildings and facilities with large areas of impervious surfaces where various operations occur that have stormwater implications. The UNM MS4 system drains stormwater to the west toward the Rio Grande, but before discharging to the river, UNM's storm sewer connects to two other permit-regulated municipalities:

- The City of Albuquerque (COA), and
- The Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA).

How the General Public & UNM's Community Can Get Involved

If you have questions, would like more information, or wish to provide public comments, contact EHS (EHSWEB-L@list.unm.edu) and review UNM's stormwater website (goto.unm.edu/sw).

[1] MS4 Permit # NMR04A000

Enclosures:

On the following six pages, the completed MS4 Annual Report Format is attached. These six pages serve as UNM's official annual report. All other information contained within this document is for supplementary purposes only.

NPDES Stormwater Program: MS4 Annual Report Format

National Pollutant Discharge Elimination System (NPDES)

Check box if you are submitting an individual Annual Report with one or more cooperative program elements. ☒

Check box if you are submitting an individual Annual Report with individual program elements only. ☐

Check box if this is a new name, address, etc. ☐

1. MS4(s)

THE UNIVERSITY OF NEW MEXICO
Name of MS4

Casey | Hall | Director, EHS
Name of Contact Person (First) (Last) (Title)

505-277-2753 | cbhall4@unm.edu
Telephone (including area code) E-mail

1801 Tucker St NE
Mailing Address

Albuquerque | NM | 87131
City State ZIP code

What size population does your MS4(s) serve? 33,000 NPDES number

What is the reporting period for this report? (mm/dd/yyyy) From Jul 1, 2023 to Jun 30, 2024

2. Water Quality Priorities

A. Does your MS4(s) discharge to waters listed as impaired on a state 303(d) list? ☒ Yes ☐ No

B. If yes, identify each impaired water, the impairment, whether a TMDL has been approved by EPA for each, and whether the TMDL assigns a wasteload allocation to your MS4(s). Use a new line for each impairment, and attach additional pages as necessary.

Impaired Water	Impairment	Approved TMDL		TMDL assigns WLA to MS4	
AMAFCA (NDC) to Rio Grande	NM 2105_50	☒ Yes	☐ No	☒ Yes	☐ No
AMAFCA (SDC) to Rio Grande	NM 2105_50	☒ Yes	☐ No	☒ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No

2. B. Continued

	Impairment	Approved TMDL		TMDL assigns WLA to MS4	
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No

C. What specific sources contributing to the impairment(s) are you targeting in your stormwater program?

Trash, debris, sediment, pet waste (E. coli), hazardous chemicals, waste from birds (E. coli), fats, oils, nutrients

D. Do you discharge to any high-quality waters (e.g., Tier 2, Tier 3, outstanding natural resource waters, or other state or federal designation)? ☐ Yes ☒ No

E. Are you implementing additional specific provisions to ensure their continued integrity? ☐ Yes ☒ No

3. Public Education and Public Participation

A. Is your public education program targeting specific pollutants and sources of those pollutants? ☒ Yes ☐ No

B. If yes, what are the specific sources and/or pollutants addressed by your public education program?

Trash, debris, animal waste, fats, oils, grease, sediment, hazardous chemicals

C. Note specific successful outcome(s) (e.g., quantified reduction in fertilizer use; NOT tasks, events, publications) fully or partially attributable to your public education program during this reporting period.

Educated >5,600 staff about illicit discharge via *Basic Annual Safety Training* and 10 staff about permit rules via a *SW Mgmt.* course; Educated 1,717 folks about pollution via in-person events.

D. Do you have an advisory committee or other body comprised of the public and other stakeholders that provides regular input on your stormwater program? ☐ Yes ☒ No

4. Construction

A. Do you have an ordinance or other regulatory mechanism stipulating:

Erosion and sediment control requirements?	☒ Yes	☐ No
Other construction waste control requirements?	☒ Yes	☐ No
Requirement to submit construction plans for review?	☒ Yes	☐ No
MS4 enforcement authority?	☒ Yes	☐ No

B. Do you have written procedures for:

Reviewing construction plans?	☒ Yes	☐ No
Performing inspections?	☒ Yes	☐ No
Responding to violations?	☒ Yes	☐ No

C. Identify the number of active construction sites ≥ 1 acre in operation in your jurisdiction at any time during the reporting period. 5

D. How many of the sites identified in 4.C did you inspect during this reporting period? 5

E. Describe, on average, the frequency with which your program conducts construction site inspections.

UNM EHS (i.e., the owner) inspects sites once per month and more often, when public complaints are reported. The construction site operator inspects every two weeks or after significant rain events.

F. Do you prioritize certain construction sites for more frequent inspections? ☒ Yes ☐ No

If Yes, based on what criteria? Sites with significant violations are promptly re-inspected to ensure corrective actions are implemented.

G. Identify which of the following types of enforcement actions you used during the reporting period for construction activities, indicate the number of actions, or note those for which you do not have authority:

☒ Yes	Notice of violation	1	No Authority	☐
☐ Yes	Administrative fines		No Authority	☒
☒ Yes	Stop Work Orders		No Authority	☐
☐ Yes	Civil penalties		No Authority	☒
☐ Yes	Criminal actions		No Authority	☒
☐ Yes	Administrative orders		No Authority	☒
☐ Yes	Other			

H. Do you use an electronic tool (e.g., GIS, data base, spreadsheet) to track the locations, inspection results, and enforcement actions of active construction sites in your jurisdiction? ☒ Yes ☐ No

I. What are the 3 most common types of violations documented during this reporting period?

Construction track out & evidence of paint discharged into a storm drain, & inadequate housekeeping.

J. How often do municipal employees receive training on the construction program? Annually

5. Illicit Discharge Elimination

A. Have you completed a map of all outfalls and receiving waters of your storm sewer system? ☒ Yes ☐ No

B. Have you completed a map of all storm drain pipes and other conveyances in the storm sewer system? ☒ Yes ☐ No

C. Identify the number of outfalls in your storm sewer system. 0

D. Do you have documented procedures, including frequency, for screening outfalls? ☒ Yes ☐ No

E. Of the outfalls identified in 5.C, how many were screened for dry weather discharges during this reporting period?

0

F. Of the outfalls identified in 5.C, how many have been screened for dry weather discharges at any time since you obtained MS4 permit coverage? 0

G. What is your frequency for screening outfalls for illicit discharges? Describe any variation based on size/type.

UNM does not have outfalls (as defined in Part VII of the permit). However, UNM has identified significant discharge points flowing into major drainage channels (owned by other MS4s) & screens those per the IDDE Plan's schedule.

H. Do you have an ordinance or other regulatory mechanism that effectively prohibits illicit discharges? ☒ Yes ☐ No

I. Do you have an ordinance or other regulatory mechanism that provides authority for you to take enforcement action and/or recover costs for addressing illicit discharges? ☒ Yes ☐ No

J. During this reporting period, how many illicit discharges/illegal connections have you discovered? 3

K. Of those illicit discharges/illegal connections that have been discovered or reported, how many have been eliminated? 3

L. How often do municipal employees receive training on the illicit discharge program? Annually

6. Stormwater Management for Municipal Operations

A. Have stormwater pollution prevention plans (or an equivalent plan) been developed for:

All public parks, ball fields, other recreational facilities and other open spaces	☒ Yes	☐ No
All municipal construction activities, including those disturbing less than 1 acre	☒ Yes	☐ No
All municipal turf grass/landscape management activities	☒ Yes	☐ No
All municipal vehicle fueling, operation and maintenance activities	☒ Yes	☐ No
All municipal maintenance yards	☒ Yes	☐ No
All municipal waste handling and disposal areas	☒ Yes	☐ No

Other

B. Are stormwater inspections conducted at these facilities? ☒ Yes ☐ No

C. If Yes, at what frequency are inspections conducted? Annually

D. List activities for which operating procedures or management practices specific to stormwater management have been developed (e.g., road repairs, catch basin cleaning).

Management practices are in place for construction activities, post-construction design and planning, illicit discharge, street sweeping, trash pickup, and infrastructure maintenance.

E. Do you prioritize certain municipal activities and/or facilities for more frequent inspection? ☒ Yes ☐ No

F. If Yes, which activities and/or facilities receive most frequent inspections?

Facilities cited with NOVs for illicit discharge or other permit requirements are promptly re-inspected to ensure corrective actions are implemented.

G. Do all municipal employees and contractors overseeing planning and implementation of stormwater-related activities receive comprehensive training on stormwater management? ☒ Yes ☐ No

H. If yes, do you also provide regular updates and refreshers? ☒ Yes ☐ No

I. If so, how frequently and/or under what circumstances?

New staff in planning, design, and construction receive on-boarding training, and again annually. Updates are also provided as new info arises. Refresher courses are mandated for recurring violators.

7. Long-term (Post-Construction) Stormwater Measures

A. Do you have an ordinance or other regulatory mechanism to require:

Site plan reviews for stormwater/water quality of all new and re-development projects?	☒ Yes	☐ No
Long-term operation and maintenance of stormwater management controls?	☒ Yes	☐ No
Retrofitting to incorporate long-term stormwater management controls?	☒ Yes	☐ No

B. If you have retrofit requirements, what are the circumstances/criteria?

Retrofitting requirements are limited to redevelopment ≥ 1 acre, which requires managing 80th percentile storm volumes. Voluntary retrofitting efforts are also under way across campus to treat runoff.

C What are your criteria for determining which new/re-development stormwater plans you will review (e.g., all projects, projects disturbing greater than one acre, etc.)?

All new and redevelopment projects that disturb ≥ 1 acre or projects disturbing < 1acre but part of a common plan that is ≥ 1 acre. Some additional voluntary reviews are provided for sites not meeting those criteria.

D. Do you require water quality or quantity design standards or performance standards, either directly or by reference to a state or other standard, be met for new development and re-development? ☒ Yes ☐ No

E. Do these performance or design standards require that pre-development hydrology be met for:

Flow volumes	☒ Yes	☐ No
Peak discharge rates	☒ Yes	☐ No
Discharge frequency	☐ Yes	☒ No
Flow duration	☐ Yes	☒ No

F. Please provide the URL/reference where all post-construction stormwater management standards can be found.

https://ehs.unm.edu/ehs-standards-and-

G. How many development and redevelopment project plans were reviewed during the reporting period to assess impacts to water quality and receiving stream protection? 2

H. How many of the plans identified in 7.G were approved? 2

I. How many privately owned permanent stormwater management practices/facilities were inspected during the reporting period? 0

J. How many of the practices/facilities identified in I were found to have inadequate maintenance? N/A

K. How long do you give operators to remedy any operation and maintenance deficiencies identified during inspections? Depends on severity.

L. Do you have authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities? ☐ Yes ☒ No

M. How many formal enforcement actions (i.e., more than a verbal or written warning) were taken for failure to adequately operate and/or maintain stormwater management practices? 0

N. Do you use an electronic tool (e.g., GIS, database, spreadsheet) to track post-construction BMPs, inspections and maintenance? ☒ Yes ☐ No

O. Do all municipal departments and/or staff (as relevant) have access to this tracking system? ☐ Yes ☒ No

P. How often do municipal employees receive training on the post-construction program? Annually

8. Program Resources

A. What was the annual expenditure to implement MS4 permit requirements this reporting period? 150,000

B. What is next year's budget for implementing the requirements of your MS4 NPDES permit? 150,000

C. This year what is/are your source(s) of funding for the stormwater program, and annual revenue (amount or percentage) derived from each?

Source:	Institutional and General funds	Amount $		OR 100
Source:		Amount $		OR
Source:		Amount $		OR

D. How many FTEs does your municipality devote to the stormwater program (specifically for implementing the stormwater program; not municipal employees with other primary responsibilities)? 1 FTE

E. Do you share program implementation responsibilities with any other entities? ☒ Yes ☐ No

Entity	Activity/Task/Responsibility	Your Oversight/Accountability Mechanism
TAG (Tech. Advis	cooperative compliance monitoring	Intergovernmental Agreement

9. Evaluating/Measuring Progress

A. What indicators do you use to evaluate the overall effectiveness of your stormwater management program, how long have you been tracking them, and at what frequency? These are not measurable goals for individual management practices or tasks, but large-scale or long-term metrics for the overall program, such as macroinvertebrate community indices, measures of effective impervious cover in the watershed, indicators of in-stream hydrologic stability, etc.

Indicator	Began Tracking (year)	Frequency	Number of Location
Volume of recycling & waste diversion	2012	Annually	N/A
# of community members engaged	2012	Semi-Annually	N/A
# of IDDE inspections w. NOVs	2018	Annually	Variable
% of P2 Inspections w. NOVs	2021	Annually	Variable
% of construction sites inspected	2021	Annually	Variable

B. What environmental quality trends have you documented over the duration of your stormwater program? Reports or summaries can be attached electronically, or provide the URL to where they may be found on the Web.

See report Middle Rio Grande E. Coli Analysis and Research: http://www.amafca.org/documents/2015_Annual_Report/AMAFCA%202015%20%28Jan%20to%20June%29%20Annual%20Report%20II.A%20-%20VI.pdf

10. Additional

Please attach any additional information on the performance of your MS4 program, including information required in Parts I.C, I.D, and III.B. If providing clarification to any of the questions above, please provide the question number (e.g., 2C) in your response.

Certification Statement and Signature

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

☒ Yes ☐ No

Federal regulations require this application to be signed as follows: **For a municipal, State, Federal, or other public facility**: by either a principal executive or ranking elected official.

Signature		Teresa Costantinidis, Executive Vice President	
		Name of Certifying Official, Title	Date (mm/dd/yyyy)

OVERVIEW: SWMP IMPLEMENTATION

Key Term(s):

- ***SWMP - Stormwater Management Plan:*** A plan outlining how UNM works to achieve the best stormwater management practices, available at https://ehs.unm.edu/assets/documents/misc-environmental-health/UNM_SWMP.pdf

Below, MCM Tables 1 – 6 display permit requirements, proposed plans and goals, and the current status for implementing all six MCMs outlined in the permit. In other words, these tables communicate how UNM's SWMP complied with the permit requirements by implementing plans with measurable goals. Then, the status column shows if and how UNM achieved each goal for the previous reporting year period.

MCM Table 1 – Public Education & Outreach

Requirement	Plan	Goal	Status
1.1. Develop, revise, implement, and maintain an education and outreach program as required in Part I.D.5.g.(i) and Part I.D.5.g.(ii): (i) The permittee shall, individually or cooperatively, develop, revise, implement, and maintain a comprehensive stormwater program to educate the community, employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater. Permittees previously covered under NMS000101 and NMR040000 must continue existing programs while updating those programs, as necessary, to comply with the requirements of this permit.	UNM will provide public education and outreach regarding stormwater impacts on the Middle Rio Grande watershed.	To provide educational opportunities (e.g., literature, training, media campaigns) for the entire UNM community to learn about mitigating pollution.	EHS developed a written Education and Outreach (E&O) program, as incorporated into the SWMP. In total, EHS provided E&O directly to 1,717 and indirectly to >15,543 community members in RY24 through various efforts as explained below. EHS participated in UNM's "Welcome Back Days" event at the beginning of each academic semester and handed out fliers with stormwater education literature. In total, approximately 869 (+973% YOY) community members engaged with the material. EHS hosted E&O events called "EHS Roadshows," where academic departments (e.g., Chemistry) are targeted to provide pollution prevention literature among other topics. In total, approximately 68 (-24% YOY) community members engaged with the material. EHS participated in presentations and panel discussions concerning stormwater in RY24. In total, approximately 33 (+22% YOY)

(ii) The permittee must implement a public education program to distribute educational knowledge to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. The permittee must: (a) Define the goals and objectives of the program based on high-priority community-wide issues; (b) Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, and websites; (c) Inform individuals and households about ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals, including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes; (d) Inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups;			community members engaged with this material. EHS tabled at the UNM Sustainability Fair engaging 265 (+71% YOY) community members about stormwater pollution. EHS participated in UNM's Safety Week. During this multi day event EHS for the first time provided pollution prevention and stormwater literature among other topics. EHS engaged with 482 students and community members. EHS included stormwater education in its *Basic Annual Safety Training*. 14,735 faculty, staff, and students completed BAST in RY24. EHS aired 18 (+0% YOY) public radio station announcements in July on KUNM (89.9 FM) with the following message: "Support comes from the U-N-M Department of Environmental Health & Safety, reminding New Mexico that picking up after pets is a simple way to help keep the Rio Grande clean during monsoon season." According to their most recent annual report, KUNM has ~91,000 listeners/week across NM, and assuming 10% of listeners heard the ad, EHS reached 910 community members (+16.6% YOY). UNM's indirect E&O efforts also included: (1) Posting general information on the UNM stormwater website; The stormwater webpage receives ~ 25 views a month. (2) Publishing information in UNM's newspaper, *The Daily Lobo*; and (3) Providing training to UNM staff. This information included:

(e) Use tailored public education programs, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school-age children, and conducting community-based projects such as storm drain stenciling, and watershed cleanups; and (f) Use materials or outreach programs directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant stormwater impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges. The permittee may tailor the outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children. The permittee must make information available for non-English speaking residents, where appropriate.			(1) How to review and provide feedback on UNM's Annual Report; (2) The proper handling, disposal, and recycling of: a. Used motor vehicle fluids, b. Household and industrial hazardous wastes, c. Organic waste, d. Recyclable waste, and e. Car wash water; (3) The proper use and handling of fertilizers, pesticides, and herbicides; and/or (4) The procedures to report illicit discharges and improper disposals. EHS educated pet owners about the proper disposal of pet waste. EHS educated facility owners and operators on their responsibility to control pollutants from their facility to the MS4. EHS continues to collaborate with UNM's Facilities Management Department to install and maintain storm drain placards on inlets across UNM's Albuquerque Campuses with the message "No Dumping, only Rain in the Drain."
1.2. Enhance the program to include requirements in Part I.D.5.g.(v) through Part I.D.5.g.(viii):	UNM will engage its community about Green Stormwater	To promote GSI awareness and development on campus.	In RY22, EHS engaged with various departments to assess their interest and willingness-to-accept GSI development in or around each department's existing infrastructure. A total of eight potential

(v) Where necessary, to comply with the Minimum Control Measures established in Part I.D.5.g.(i) and Part I.D.5.g.(ii), the permittee should develop a program or modify/revise an existing education and outreach program to: (a) Promote, publicize, and facilitate the use of Green Infrastructure (GI)/Low Impact Development (LID)/Sustainability practices; and (b) Include an integrated public education program (including all permittee departments and programs within the MS4) regarding litter reduction, reduction in pesticide/herbicide use, recycling, and proper disposal (including yard waste, hazardous waste materials, and used motor vehicle fluids), and GI/LID/Sustainable practices (including xeriscaping, reduced water consumption, water harvesting practices allowed by the New Mexico State Engineer Office). (vi) The permittee may collaborate or partner with other MS4 operators to maximize the program and cost-effectiveness of the required outreach. (vii) The education and outreach program may use citizen hotlines as a low-cost strategy to engage the public in illicit discharge surveillance. (viii) The permittee may use stormwater educational materials provided by the State, Tribe, EPA,	Infrastructure (GSI), illicit discharge reporting, and Fats, Oils, & Grease (FOG) best practices.	To inform the community about how and when to report illicit discharges. To inform food handling employees and residential hall inhabitants about reducing FOG discharges to wastewater and storm sewers.	GSI projects were scoped, and assessments included meetings with building coordinators to gather their input on GSI development. Three of the eight projects advanced to engineering studies aimed at developing construction documents to eventually build GSI. These three studies were published in RY23. EHS provided and maintained two primary reporting methods for illicit discharge: (1) The **Accident, Incident & Spill Reporting** form is available 24/7 to report spills at goto.unm.edu/spill; and (2) A 24/7 Duty Officer is available to respond to reports of illicit discharges by calling (505) 951-0794. EHS informed UNM employees and students about these two methods in various training courses and E&O events. EHS continued to distribute educational poster for UNM's Food Service Establishment (FSE) sinks. The poster's contents inform employees and students about how to dispose of FOG, the consequences of failing to do so, and how to report illicit discharges. EHS also made the FOG poster available in Spanish (Figure 5) and was provided to each food service establishment.

environmental, public interest or trade organizations, or other MS4s. The permittee may also integrate the education and outreach program with existing education and outreach programs in the Middle Rio Grande area. Examples of existing programs include: (a) Classroom education on stormwater; A. Develop a watershed map to help students visualize the area impacted. B. Develop pet-specific education (b) Establish a water committee/advisor group; (c) Contribute and participate in Stormwater Quality Team; (d) Education/outreach for commercial activities; (e) Hold regular employee training with industry groups (f) Education of lawn and garden activities; (g) Education on sustainable practices; (h) Education/outreach of pet waste management; (i) Education on the proper disposal of household hazardous waste; (j) Education/outreach programs aimed at minority and disadvantaged communities and children; (k) Education/outreach of trash management; (l) Education/outreach in public events; A. Participate in local events—brochures, posters, etc. B. Participate in regional events (i.e., State Fair, Balloon Fiesta).			

(m) Education/outreach using the media (e.g., publish local newsletters); (n) Education/outreach on water conservation practices designed to reduce pollutants in stormwater for home residences.			
1.3. Describe other proposed activities to address the Public Education and Outreach on Stormwater Impacts Measure:	N/A	N/A	N/A

MCM Table 2 – Public Participation

Requirement	Plan	Goal	Status
2.1. Develop (or update), implement, and maintain a public involvement and participation plan as required in Part I.D.5.h.(ii) and Part I.D.5.h.(iii): (ii) The permittee shall develop, revise, implement and maintain a plan to encourage public involvement and provide opportunities for participation in the review, modification, and implementation of the SWMP; develop and implement a process by which public comments on the plan are received and reviewed by the person(s) responsible for the SWMP; and, make the SWMP available to the public and to the operator of any MS4 or Tribal authority receiving discharges from the MS4. Permittees previously covered under NMS000101 or NMR040000 must continue existing public involvement and participation programs while updating those programs, as necessary, to comply with the requirements of this permit. (iii) The plan required in Part I.D.5.h.(ii) shall include a comprehensive planning process that involves public participation and, where necessary intergovernmental	UNM will continue to welcome public participation in its SWMP. EHS will involve academic and non-academic departments (e.g., Facilities Management, Planning, Design & Construction; Architecture [academic]; and Geography & Environmental Studies [academic]) as stakeholders in the development and revision of UNM's SWMP. UNM will participate in local public forums where active public involvement occurs (e.g., Technical Advisory Group) on stormwater issues. EHS will train and update other	To provide the community with the means to participate in the development, implementation, and revision of the SWMP.	UNM requested public participation and feedback on its SWMP and all Annual Reports. These are posted on the EHS website, and a participation narrative with a link is advertised in the *Daily Lobo* newspaper. For example, Annual Reports are advertised for public comment in the newspaper with the following language: "**AS LOCAL STORM SEWERS** collect rainfall and snowmelt, the water that runs off can carry contaminants to the Rio Grande. However, UNM remains committed to sustainably protecting the natural environment. To learn how UNM protects the river, review the Annual Stormwater Report at goto.unm.edu/stormwater. UNM requests and encourages public comments on this report before December 1st, which can be emailed to EHSweb-L@list.UNM.edu." Likewise, EHS posted 20 notices (i.e., posters; see **Error! Reference source not found.** & Figure 2) soliciting feedback on the Annual Report at various locations around campus. Posters included similar language to the ad and included a link and a QR code for accessing the report. EHS solicited comments from academic and non-academic departments regarding the Annual Report. EHS attended and participated in all Technical Advisory Group meetings this Reporting Year. Members regularly include: - City of Albuquerque - AMAFCA (Albuquerque Metropolitan Arroyo Flood Control Authority) - NM DOT (New Mexico Dept. of Transportation District 3) - Bernalillo County - Sandoval County - Village of Corrales

coordination to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques, and system, design and engineering methods, and such other provisions which are appropriate. The permittee must include the following elements in the plan: (a) A detailed description of the general plan for informing the public of involvement and participation opportunities, including types of activities; target audiences; how interested parties may access the SWMP; and how the public was involved in the development of the SWMP; (b) The development and implementation of at least one (1) assessment of public behavioral change following a public education and/or participation event; (c) A process to solicit involvement by environmental groups, environmental justice communities, civic organizations, or other neighborhoods/organizations interested in water quality-related issues, including but not limited to the Middle Rio Grande Water Quality Work Group, the Middle Rio Grande Bosque Initiative, the Middle Rio Grande Endangered Species Act Collaborative Program, the Middle	departments about stormwater issues and solicits input and participation.		- City of Rio Rancho - Los Ranchos de Albuquerque - KAFB (Kirtland Air Force Base) - Town of Bernalillo - EXPO (State Fairgrounds/Expo NM) - SSCAFCA (Southern Sandoval County Arroyo Flood Control Authority) - ESCAFCA (Eastern Sandoval County Arroyo Flood Control Authority) - Sandia Laboratories, Department of Energy (DOE) - Pueblo of Sandia - Pueblo of Isleta - Pueblo of Santa Ana

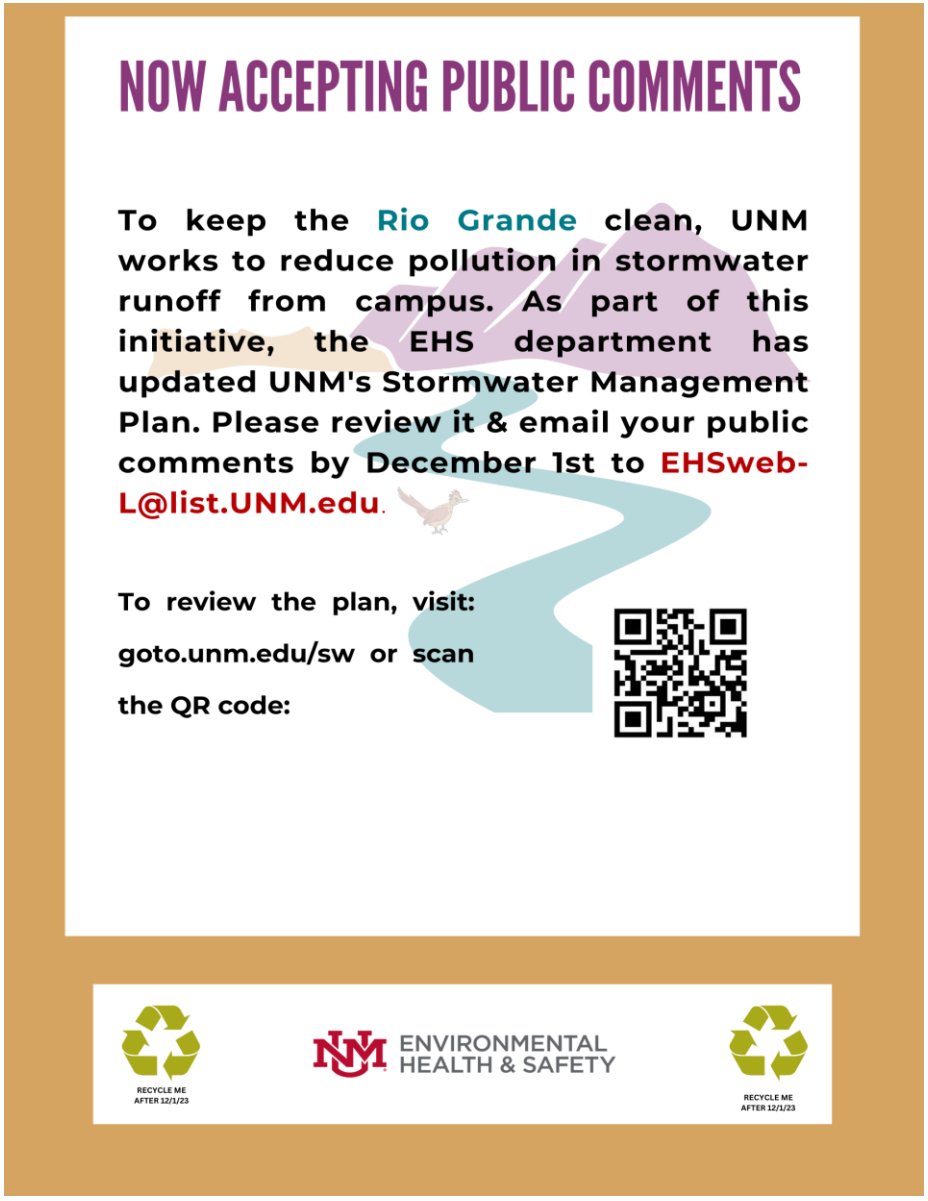
Rio Grande-Albuquerque Reach Watershed Group, the Pueblos of Santa Ana, Sandia and Isleta, Albuquerque Bernalillo County Water Utility Authority, UNM Colleges, and Schools, and Chartered Student Organizations; and (d) An evaluation of opportunities to utilize volunteers for stormwater pollution prevention activities and awareness throughout the area.			
2.2. Describe the plan to comply with State, Tribal, and local notice requirements when implementing a Public Involvement and Participation Program as required in Part I.D.5.h.(iv): (iv) The permittee shall comply with State, Tribal, and local public notice requirements when implementing a public involvement/ participation program.	UNM will provide public notice of its plan to submit an NOI (Notice Of Intent) and SWMP to the EPA.	To comply with State, Tribal, and local notice requirements.	UNM provided public notice of its plan to submit an NOI and SWMP to the EPA. The notice was published in the Albuquerque Journal. The draft NOI and SWMP were published on the EHS website, with copies available at the Zimmerman Library, and the public was allowed 30 days to submit written comments.
2.3. Describe a plan to include elements as required in Part I.D.5.h.(v): (v) The public participation process must reach out to all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as	UNM will serve on the Technical Advisory Group (TAG) and participate in voluntary monitoring.	To encourage participation in program development and implementation.	EHS attended and participated in Technical Advisory Group meetings. EHS participated in the voluntary monitoring efforts led by AMAFCA and COA. Details are appended to this report.

citizen representatives on a local stormwater management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts.			
2.4. As required in Part I.D.5.h.(viii), provide the internet site (or website) where the SWMP document, Annual Reports, and other documents will be available to the public: (viii) The permittee must provide public accessibility of the Stormwater Management Program (SWMP) document and Annual Reports online via the Internet and during normal business hours at the MS4 operator's main office, a local library, posting on the internet, and/or other readily accessible location for public inspection and copying consistent with any applicable federal, state, tribal, or local open records requirements. Upon a showing of significant public interest, the MS4 operator is encouraged to hold a public meeting (or include it in the agenda of a regularly scheduled city council meeting, etc.) on the NOI, SWMP, and Annual Reports. (See Part III B)	EHS will publish UNM's SWMP and Annual Reports on its website and provide a forum.	To seek and address input from the public.	UNM requested public participation and feedback on its SWMP and all Annual Reports.

2.5. Enhance the program to include requirements in Part I.D.5.h.(ix): (ix) The permittee may integrate the public Involvement and participation program with existing education and outreach programs in the Middle Rio Grande area. Examples of existing programs include Adopt-A-Stream Programs; Attitude Surveys; Community Hotlines (e.g., the establishment of a "311"-type number and system established to handle storm-water-related concerns, setting up a public tracking/reporting system, using phones and social media); Revegetation Programs; Storm Drain Stenciling Programs; Stream cleanup and Monitoring program/events.	UNM will integrate public education and outreach efforts with public involvement and participation efforts.	To provide a cohesive outreach and participation campaign that informs the community about stormwater issues and reporting procedures.	EHS established and maintained campaigns and reporting infrastructure to facilitate maximum public education and involvement.
2.6. Describe other proposed activities to address the Public Involvement and Participation Measure:	N/A	N/A	N/A

Figure 2 - Public Feedback Poster for the RY24 Annual Report

Figure 1 - Public Feedback Poster for the RY24 Annual Report



MCM Table 3 – Pollution Prevention (P2) & Good Housekeeping

Requirement	Plan	Goal	Status
3.1. Develop or update the Pollution Prevention/Good House Keeping program to include the elements in Part I.D.5.c.(i): (i) The permittee must develop, revise and implement an operation and maintenance program that includes a training component and the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Permittees previously covered under NMS000101 or NMR040000 must continue existing programs while updating those programs, as necessary, to comply with the requirements of this permit. The program must include: (a) Development and implementation of an employee training program to incorporate pollution prevention and good housekeeping techniques into everyday operations and maintenance activities. The employee training program must be designed to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance. The permittee must also develop a tracking procedure and ensure that employee	UNM will implement, review and enhance pollution prevention practices. When possible, UNM will implement new source control procedures to limit the discharge of pollutants from the MS4. As required, UNM's Facilities Management Department will implement: a) Stormwater Operations & Maintenance (O&M) Program b) grounds and landscaping maintenance; c) road and parking lot operation and maintenance; d) fleet and building maintenance; e) new construction and	To train employees about pollution prevention, response, and reporting procedures relating to operations and maintenance of stormwater infrastructure.	Online Stormwater Management training was provided to UNM's Facilities Management Department during the reporting period. This reporting year involved significantly more effort towards in-person trainings and E&O. Nevertheless, the following courses were offered with the following satisfactory completion statistics: ○ Stormwater Management: 10 (-66% YOY); ○ Hazardous Waste Management: 163 (+708% YOY); ○ Wastewater Management: 7 (-76% YOY); & ○ Lab Safety Series 1, 2, & 3: 31 people (-65% YOY). EHS maintained and enforced its *Stormwater Guidance for UNM Staff and Contractors*. The goal of this document is to inform persons in charge of new and redevelopment projects on campus about stormwater rules and ways to comply with the EPA's *2022 Construction General Permit* and *MRG MS4 Permit*. EHS trained 2 (-85% YOY) persons in charge of new and redevelopment projects on campus about pre and post-construction requirements regarding stormwater rules. EHS redrafted, published, and implemented UNM's SPCC as required every five years per 40 CFR 112. Likewise, EHS developed enhanced tools and procured additional support equipment for preventing, controlling, and counter-measuring oil spills. UNM has prepared a written Stormwater Operation and Maintenance manual that includes the required elements listed. UNM's Facilities Management Department implemented: a) Stormwater Operations & Maintenance (O&M) Program

turnover is considered when determining the frequency of training; (b) Maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural stormwater controls to reduce floatable, trash, and other pollutants discharged from the MS4. (c) Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations, snow disposal areas operated by the permittee, and waste transfer stations; (d) Procedures for properly disposing of waste removed from the separate storm sewers and areas listed in Part I.D.5.c.(i).(c) (such as dredge spoil, accumulated sediments, floatables, and other debris); and (e) Procedures to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Note: The permittee may use training materials that are available from EPA, NMED, Tribe, or other organizations.	land disturbance training; f) utility systems maintenance; & g) MS4 system maintenance. The UNM O&M program will include training for appropriate UNM staff on improving stormwater quality. UNM's Facilities Management Department's O&M Program maintains: a) An updated list of stormwater quality facilities by drainage basin, including location and description; b) A target number of 20 stormwater quality facilities will be inspected once every three months by UNM's Facilities Management Department and cleaned if necessary; and		b) Grounds and landscaping maintenance; c) Road and parking lot operation and maintenance; d) Fleet and building maintenance; e) New construction and land disturbance training; f) Utility systems maintenance; & g) MS4 system maintenance.

	c) A leading source control program of the street and hard-scaping sweep and daily (M-F) litter pickup on campus. EHS maintains UNM's Spill Prevention, Countermeasure, and Control (SPCC) Plan to address the risks from oil tanks greater than or equal to 55 gallons. UNM takes measures to ensure that parties responsible for a spill on campus take reasonable steps to control and minimize threats to human health and the environment. Potential discharges will be controlled through the implementation of spill prevention practices, self-inspections, and employee training.		

	UNM's Facilities Management Department's O&M Program will also include measures to control the following stormwater pollutants: a) De-icing salts; b) Roadway debris and roadside vegetation management practices; leaked automotive fluids in equipment maintenance yards; c) Debris on hard-scaping (roads, etc.) that can be reduced by modifying street sweeping strategies; and d) Targeting problem areas on campus that may have greater pollution potential.		
3.2. Enhance the program to include the elements in Part I.D.5.c.(ii):	UNM will:	Submit annual progress	

(ii) The Pollution Prevention/Good Housekeeping program must include the following elements: (a) Develop or update the existing list of all stormwater quality facilities by drainage basin, including location and description; (b) Develop or modify existing operational manual for de-icing activities addressing alternate materials and methods to control impacts on stormwater quality; (c) Develop or modify an existing program to control pollution in stormwater runoff from equipment and vehicle maintenance yards and maintenance center operations located within the MS4; (d) Develop or modify the existing street sweeping program. Assess possible benefits from changing the frequency or timing of sweeping activities or utilizing different equipment for sweeping activities; (e) A description of procedures used by permittees to target roadway areas most likely to contribute pollutants to and from the MS4 (i.e., runoff discharges directly to sensitive receiving water, roadway receives a majority of de-icing material, roadway receives excess litter, roadway	Implement the O&M program to support waste disposal standard operating procedures (SOPs), including for motor vehicle fluids, toxic paints, solvents, fertilizers, pesticides, herbicides, and any other hazardous material, by June 2017. This will include a list of opportunities for recycling substances. Also, SOPs will address the removal of sediments, debris, floatables, and litter, including pet wastes. By June 20, 2017, re-assess existing flood control infrastructure for the potential to retro-fit it with additional water quality enhancement features. Note: UNM's O&M Program maintains:	updates in the Annual Report.	UNM's Facilities Management Department continued routine O&M operations for street sweeping, trash collections, and recycling. Hazardous chemicals and used oils from maintenance shops were disposed of through EHS or other third-party vendors. With the exception of a few small detention basins, UNM does not have flood control infrastructure. The flood control infrastructure is owned and operated by AMAFCA. No retrofit evaluations were conducted during this reporting period.

receives greater loads of oil and grease); (f) Develop or revise existing standard operating procedures for the collection of used motor vehicle fluids (at a minimum oil and antifreeze) and toxics (including paint, solvents, fertilizers, pesticides, herbicides, and other hazardous materials) used in permittee operations or discarded in the MS4, for recycle, reuse, or proper disposal; (g) Develop or revise existing standard operating procedures for the disposal of accumulated sediments, floatables, and other debris collected from the MS4 and during permittee operations to ensure proper disposal; (h) Develop or revised existing litter source control programs to include public awareness campaigns targeting the permittee audience; and (i) Develop or review and revise, as necessary, the criteria, procedures, and schedule to evaluate existing flood control devices, structures, and drainage ways to assess the potential of retrofitting to provide additional pollutant removal from stormwater. Implement routine reviews to ensure new and/or innovative practices are implemented where applicable.	a) an updated list of stormwater quality facilities by drainage basin, including location and description; and b) a target number of 20 stormwater quality facilities shall be inspected once every three months by UNM's Facilities Management Department and cleaned if necessary.		

(j) Enhance inspection and maintenance programs by coordinating with maintenance personnel to ensure that a target number of structures per basin are inspected and maintained per quarter; (k) Enhance the existing program to control the discharge of floatables and trash from the MS4 by implementing source control of floatables in industrial and commercial areas; (l) Include in each annual report a cumulative summary of retrofit evaluations conducted during the permit term on existing flood control devices, structures, and drainage ways to benefit water quality. Update the SWMP to include a schedule (with priorities) for identified retrofit projects; (m) Flood management projects: review and revise, as necessary, technical criteria guidance documents and program for the assessment of water quality impacts and incorporation of water quality controls into future flood control projects. The criteria guidance document must include the following elements: A. Describe how new flood control projects are assessed for water quality impacts. B. Provide citations and descriptions of design			

standards that ensure water quality controls are incorporated in future flood control projects. C. Include methods for permittees to update standards with new and/or innovative practices. D. Describe master planning and project planning procedures and design review procedures. (n) Develop procedures to control the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied, by the permittee's employees or contractors, to public right-of-ways, parks, and other municipal property. The permittee must provide an updated description of the data monitoring system for all permittee departments utilizing pesticides, herbicides, and fertilizers.			
3.3. Develop or update a list and a map of industrial facilities owned or operated by the permittee as required in Part I.D.5.c.(iii): (iii) Comply with the requirements included in the EPA Multi-Sector General Permit (MSGP) to control runoff from industrial facilities (as	UNM does not have operations within the campus jurisdiction that would normally be categorized as industrial.	N/A	N/A

defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi)) owned or operated by the permittees and ultimately discharge to the MS4. The permittees must develop or update: (a) A list of municipal/permittee operations impacted by this program, (b) A map showing the industrial facilities owned and operated by the MS4, (c) A list of the industrial facilities (other than large construction activities defined as industrial activity) that will be included in the industrial runoff control program by category and by basin. The list must include the permit authorization number or an MSGP NOI ID for each facility, as applicable.			
3.4. Describe other proposed activities to address Pollution Prevention/Good Housekeeping for Municipal/permittee Operations Measure:	UNM will continue to explore additional activities to address the Pollution Prevention/Good Housekeeping requirements for municipal operations.	Additional proposed activities will be reported in the annual report.	In RY22, EHS completed a GIS inventory of all storm drains on campus and replaced all missing/damaged “no dumping” plaques. No changes were necessary in RY24. EHS performed 43 (+26% YOY) pollution prevention inspections across campus. In RY24, EHS continued its Pollution Prevention (P2) program, tailoring inspections to 17 different facility operations. Previously, inspectors utilized a generic inspection checklist, which did not review specific guidelines for different operations. The new checklists are designed using agency (e.g., EPA, ABCWUA) factsheets and regulations to improve program efficacy. Now, each operations type has specific inspection

			criteria to identify hazards and reduce pollution. For example, the new checklists reflect the following 17 facility operations: 1. Automotive 2. Business 3. Chemical 4. Dental 5. General (non-specific) 6. Groundskeeping & Pest Control 7. Material & Equip. Storage 8. Medical (non-Dental) 9. Metal Works 10. Painting & Coating 11. Print & Copy 12. Research Laboratory (non-Chem; non-Med.) 13. Restaurant (FOG) 14. Restaurant (non-FOG) 15. Solid Waste & Recycling 16. Utilities 17. Water Use & Conservation EHS continues expanding the scope to reach beyond just stormwater quality issues. Using the precautionary principal throughout various processes to minimize pollution to the environment, including the hydrosphere, atmosphere, lithosphere, and biosphere. A logic model of the revised program is shown in Figure 3 below, detailing the P2 program's new scope of work. EHS continued distributing educational posters including a Spanish version (see Figure 5) to Food Service Establishment (FSE) kitchen sinks. The poster's contents inform employees and students about how to dispose of FOG, the consequences of failing to do so, and how to report illicit discharges. Clearly, the MS4 Permit is exclusively concerned with storm sewers, but sanitary sewer overflows can occur. Therefore, EHS continued distributing educational signage (see Figure 4 & Figure 6) to post above laboratory sinks to reduce illicit

			discharges to sanitary sewers. Likewise, the materials reduce the potential to introduce POTW pass-throughs, which are also regulated under the NPDES program.

Figure 3 - A Logic Model for the Revised P2 Program.

UNM Pollution Prevention (P2) Program: A Logic Model

Intervening with the precautionary principal to minimize pollution.

ENVIRONMENTAL HEALTH & SAFETY

Inputs	Output Activities	Output Audience	Short-Term Outcomes	Med-Term Outcomes	Long-Term Outcomes
What EHS invests. →	*What EHS does.* →	*Who EHS reaches.* →	*Quantitative/Measurable results.* →		*Narrative results.*
◷ Time ◴ $ Money $ ▸ Expertise ◂	1. Inspect Facilities to minimize pollution risks. 2. Design training for P2 (general & sector-based). 3. Provide preventative training annually. 4. Provide remedial training for P2 violators.	1. Facilities Managers 2. Grounds/Landscaping Staff 3. Restaurant Staff 4. Automotive Staff 5. Waste Mgmt. Staff 6. Research Staff A. Arch./Eng./Plan. B. Labs	↗ Training ↗ Awareness ↘ Ignorance ↘ Illicit behavior	↗ BMPs ↗ Use of green products ↗ IPM use ↗ Enhanced O&M ↗ Eco-consciousness ↘ IDDE: ↘ Soil Erosion ↘ F.O.G. ↘ Petroleum ↘ Floatables ↘ Chemicals	**Enhance the quality of the:** • Atmosphere (air); • Hydrosphere (water); • Lithosphere (soil); & • Biosphere (life), ✓ Human & ✓ Non-human. **Achieve Compliance with:** • ABC AQB Title V Permit • SDWA (42 USC 300f) • NMED GWB MOU • P2 Act (42 USC 133) • PST Rule (20.5 NMAC) • SPCC Plan (40 CFR 112) • MS4 Permit • CGP Permit • ABCWUA MOU

Assumptions:

1. The P2 program focuses on preventing pollution sources that impacts air, water, soil, or life through inspection, education, & training.
2. Changes will be outlined in a new P2 SOP (expected FY23).
3. Implementing preventative & remedial training will reduce adverse behaviors.

External Factors:

1. Internal/External Policies
2. Internal/External Agencies/Departments

Program Evaluation:

Identify Metrics → Collect Data → Analyze → Synthesize & Report → Intervene → Restart

Key:

↗ = Increase; ↘ = Decrease

Figure 5 - FOG Poster

Figure 4 - No Chemicals Down the Drain Stickers.

Figure 6 - Hazardous Waste Poster

<table>
<tr><th>Requirement</th><th>Plan</th><th>Goal</th><th>Status</th></tr>
<tr>
<td>3.1.2. Describe the plan to estimate the annual volume of floatables and trash removed from each control facility and characterize the floatable type as required in Part I.D.5.f.(i)(b):

(b) Estimate the annual volume of floatables and trash removed from each control facility and characterize the floatable type.</td>
<td>UNM does not own or operate any major stormwater quality control facilities. UNM's Facilities Management Department recycling will continue to track and report the estimated volume of trash and recyclable materials collected from campus.

UNM carefully collects and disposes of all wastes that could be hazardous to stormwater quality. For instance, the EHS Department picks up and properly disposes of UNM's hazardous wastes in compliance with RCRA requirements. EHS, UNM's Facilities Management Department, and other UNM departments properly manage and dispose of regulated universal wastes and other special wastes. UNM policy UBPP 7780 forbids automotive maintenance activities on campus outside of the fleet and equipment maintenance operations at the UNM's Facilities Management Department Automotive Center. UNM is expanding its waste collection program to include fats, oils, and greases. UNM continues to coordinate waste collection efforts amongst departments.</td>
<td>The progress and estimated volume of trash and recyclable materials will be reported in the annual report.</td>
<td>Hazardous waste disposed of by EHS in CY23:
• 13.25 tons (+13.7% YOY)

Non-hazardous waste disposed of by EHS in CY23:
• 7.02 tons (+3.2% YOY)

Otherwise, the UNM Facilities Management (FM) department manages and records municipal solid waste and reports data to New Mexico Environment Department (NMED) on a Calendar Year (CY) basis. Therefore, the data below match that format. CY24 totals are not yet available. However, CY23 totals equaled 483.08 tons of recycled material and 983.76 tons of landfilled waste. These totals are broken down below:

<table>
<tr><th colspan="2">Annual Report</th></tr>
<tr><th>MSW - NMED</th><th>2023</th></tr>
<tr><td>Landfilled - UNM</td><td>983.76</td></tr>
<tr><td>Brush/Green Waste</td><td>0.00</td></tr>
<tr><td>Scrap Tires</td><td>0.00</td></tr>
<tr><td>Motor Oil</td><td>0.00</td></tr>
</table>
</td>
</tr>
</table>

Antifreeze	0.00
Lead Acid Batteries	0.00
Other Co-mingled	0.00
Recyclables - NMED	**2023**
Mixed Paper	44.97
Cardboard	141.63
Newspaper	0.62
Office Paper	56.60
PET#1	2.41
Aluminum	1.60
Glass	1.38
Scrap Metal	31.47
White Goods	14.47
Pallets	2.13
Food Waste	78.51
Brush/Green Waste	107.29
Other Co-mingled - NMED	**2023**
Mixed plastic	0.23
Fluorescent bulbs	0.47
Toners	0.00
Batteries, rechargeable	2.74
Batteries, alkaline	0.25
Text books	0.00

3.1.3. Describe other proposed activities to address the Control of Floatables Discharges Measure:	No additional activities are being proposed at this time. UNM will continue to explore additional activities to address the Control of Floatables Discharges Measure.	N/A	N/A

Control of Floatables Discharges

Requirement	Plan	Goal	Status
3.1.1. Develop a schedule to implement the program as required in Part I.D.5.f.(i)(a): (i) The permittee must develop, update, and implement a program to address and control floatables in discharges into the MS4. The floatables control program shall include source controls and, where necessary, structural controls. Permittees previously covered under NMS000101 or NMR040000 must continue existing programs while updating those programs, as necessary, to comply with the requirements of this permit. The following elements must be included in the program: (a) Develop a schedule for implementation of the program to control floatables in discharges into the MS4 (Note: AMAFCA and the City of Albuquerque should update the schedule according to the findings of the 2005 AMAFCA/COA Floatable and Gross Pollutant Study and other studies).	UNM's approach is to control floatables at the source. UNM has a robust trash collection system, with a dense network of trash collection stations across campus. UNM may have the most intensive litter removal and street and sidewalk sweeping program in the Albuquerque metro area that removes floatables from the campus grounds before they can come into contact with stormwater. These activities will remain continuous. Furthermore, UNM will install and maintain grates in stormwater inlets across campus to control floatables discharge. The UNM Facilities Management department will continue to track and report the estimated volume of floatables and trash removed from our control facilities. Beginning in June 2017, UNM's Facilities Management Department will start characterizing the types of floatables removed from control facilities.	To implement a schedule for implementation of controls of floatables in discharges into the MS4 Include a discussion of the volume and type of trash removed in Annual Reports.	UNM Grounds and Landscaping personnel continued implementing quarterly maintenance and operations on stormwater inlets that trap floatables and other debris. UNM's Facilities Management Department has identified a list of storm drain inlets that are cleaned at least quarterly. UNM's Facilities Management Department performs street sweeping every day, and each UNM street is swept on average twice a week. The frequency of sweeping reduces in the winter months. The amount of debris collected from street sweeping for CY23 is TBD. Note: these totals are included in the totals for Landfilled Municipal Solid

			Waste, listed in the “Waste Collection Programs” table above.

UNM Storm Drain Inlets Inspected & Maintained for Proper Operation at least Quarterly

Inlet #	Location:
1.	West of Centennial Engineering (Bldg.122) in the roadway along the West Curb line
2.	West of Hibben Center (Bldg. 15) in the bump out on the West side of the road (2 inlets)
3.	North of Zimmerman (Bldg. 53) in the parking lot
4.	Walkway east of Zimmerman (Bldg. 53) and East of Collage of Education (Bldg. 57)
5.	SE of Hokona Zia (Bldg. 58) in Redondo Way
6.	NE of Simpson Hall (Bldg. 66) in Redondo Way
7.	South of Santa Clara (Bldg. 61) in Redondo Way
8.	North of SRC Commons (Bldg. 88)
9.	NE of Mesa Vista (Bldg. 56) at Area 3
10.	South side of Duck Pond
11.	SE side of Scholes Hall (Bldg. 10)
12.	SW of Chapel (Bldg. 25)
13.	East of Bandelier Hall East (Bldg. 8) at Rose Garden
14.	North side of EECE (Bldg. 46) in the south end of the parking lot
15.	NW of Ford Utilities (Bldg. 116) in the parking lot
16.	SW corner of Novitski Hall (Bldg. 249) in SW corner of the south parking lot
17.	Southside of HSSB (Bldg. 266) in the walkway
18.	NW of HSSB (Bldg. 266) in the lawn area
19.	NW of Novitski Hall (Bldg. 249) in the SE corner of the north parking lot (2 inlets)
20.	NW of Observatory (Bldg. 208) in the NW corner of the parking lot.

Source: UNM Facilities Management, Grounds & Landscaping. 2012.

MCM Table 4 – Illicit Discharge Detection & Elimination (IDDE)

Requirement	Plan	Goal	Status
4.1. Mapping as required in Part I.D.5.e.(i)(a); (i) The permittee shall develop, revise, implement, and enforce a program to detect and eliminate illicit discharges (as defined at 40 CFR 122.26(b)(2)) entering the MS4. Permittees previously covered under NMS000101 or NMR040000 must continue existing programs while updating those programs, as necessary, to comply with the requirements of this permit. The permittee must: (a) Develop, if not already completed, a storm sewer system map showing the names and locations of all outfalls as well as the names and locations of all waters of the United States that receive discharges from those outfalls. Identify all discharges points into major drainage channels draining more than twenty (20) percent of the MS4 area;	UNM completed a campus utility map in 2013, which includes its storm sever map. UNM continues to revise and update its storm sewer system map as necessary.	Updates to the map will be reported in the annual report. .	UNM does not have what would be considered outfalls as defined in Part VII of the permit. However, UNM has identified significant discharge points into major drainage channels. EHS updated campus utility maps to include location, condition, and photos of all storm drains and sewers. The new utility map is now integrated into a GIS repository managed by UNM's Earth Data Analysis Center. EHS also maintains an internal dashboard, showing IDDE investigations (Figure 7). The intent of the tool is to systematically streamline investigations and reports and to understand where and how IDDE occurs. Over time, the tool shows IDDE "hot spots" and identifies common issues that can be met with interventions to further reduce IDDE.

4.2. Ordinance (or other control methods) as required in Part I.D.5.e.(i)(b): (b) To the extent allowable under State, Tribal, or local law, effectively prohibit, through ordinance or other regulatory mechanisms, non-stormwater discharges into the MS4, and implement appropriate enforcement procedures and actions;	UNM does not have formal regulatory enforcement power since it is not a traditional municipality, but UNM can utilize contractual and employee disciplinary mechanisms to discourage non-stormwater discharges from contractors and employees, respectively. To the extent possible, EHS will work with other UNM departments and stakeholders (e.g., developers) to train appropriate personnel about mitigating IDDE. EHS will also issue NOVs (Notices of Violations) as required per UNM's IDDE Plan.	To develop mechanisms to control non-stormwater discharges into the MS4 and implement appropriate enforcement procedures and actions	UNM continued to implement its activities to detect and eliminate illicit discharges. EHS continued to train staff on how to detect and report illicit discharges. The following standards and guidelines prohibit non-stormwater discharges into the MS4: • UNM's IDDE Plan • UNM's Stormwater Guidance for Staff and Contractors • UNM's Oil Spill Prevention, Control, and Countermeasure (SPCC) Plan • SOP for Oil Tanks at UNM & Health Sciences • UNM's Construction Safety Manual • UNM's Chemical Hygiene Plan
4.3. Develop and implement an IDDE plan as required in Part I.D.5.e.(i)(c):	UNM will implement efforts to detect and eliminate illicit discharges and improper disposal that may impact the quality of stormwater discharged from the campus.	To develop an IDDE plan and reduce illicit discharges.	A third-party contractor developed an IDDE plan on September 13, 2017. IDDE inspections were

(c) Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to the MS4. The permittee must include the following elements in the plan: A. Procedures for locating priority areas likely to have illicit discharges, including field tests for selected pollutant indicators (ammonia, boron, chlorine, color, conductivity, detergents, E. coli, enterococci, total coliform, fluoride, hardness, pH, potassium, conductivity, surfactants), and visually screening outfalls during dry weather; B. Procedures for enforcement, including enforcement escalation procedures for recalcitrant or repeat offenders; C. Procedures for removing the source of the discharge; D. Procedures for program evaluation and assessment; and E. Procedures for coordination with adjacent municipalities and/or state, tribal, or federal regulatory agencies to address situations where investigations indicate the illicit discharge originates outside the MS4 jurisdiction.	EHS will manage UNM's IDDE Program and maintain maps applicable to the campus. Newly discovered IDDE will be assessed for their potential impact on the Rio Grande. EHS will investigate dry stormwater discharges. Initial assessments of stormwater quality will occur by visual methods. As suspicious water quality conditions are encountered, water quality samples may be tested with field instruments to monitor conductivity, pH, temperature, dissolved oxygen, turbidity, etc. If visual and field instrumentation assessment is unsatisfactory and another contamination is suspected, then grab samples may be collected for potentially applicable lab analysis by EPA methods, e.g., TPH, BTEX, E. Coli, nitrates/nitrite, etc. If unusual levels of water quality contaminants are observed, UNM will analyze the above information to identify the source (on campus) or up-gradient discharge location (off campus). UNM will notify relevant MS4 entities if IDDE is suspected to be discharged from their jurisdiction onto campus. If UNM identifies a significant illicit discharge or improper disposal on campus, then that finding and a brief explanation of any potential hazard will be posted on an EHS website page to inform any interested members of the campus or local communities.		conducted at facilities identified as potential sources for illicit discharges. Additionally, all reports of illicit discharges are investigated, and a written report is issued to the appropriate staff for corrective action. If the source of an illicit discharge is outside the jurisdiction of UNM, it is referred to the appropriate authority (e.g., the City of Albuquerque). During this reporting year, of the 3 IDDE investigations 1 resulted in the issuance of NOV per the UNM IDDE Plan. All investigations resulted in conversations with affected employees and supervisors to discourage IDDE and train them about the impacts of their actions. EHS continued to use an IDDE dashboard to track incidents and report basic statistics that can be used to intervene in future operations to reduce illicit discharge (Figure 7).

	EHS will incorporate that finding into stormwater quality training for the associated UNM staff that can best control the problem. IDDE screening and inspections will be conducted at the frequency outlined in UNM's written IDDE Plan.		
4.4. Develop an education program as required in Part I.D.5.e.(i)(d): (d) Develop an education program to promote, publicize, and facilitate public reporting of illicit connections or discharges and distribution of outreach materials. The permittee shall inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.	By June 20, 2016, EHS will include in its education program information to promote and facilitate anonymous reporting of illicit connections or discharges by the campus community.		A written education program has been completed and is incorporated by reference into this SWMP. Copies are available upon request. EHS provided and maintained two primary reporting methods for illicit discharge: (1) The **Accident, Incident & Spill Reporting** form is available 24/7 to report spills at goto.unm.edu/spill; & (2) A 24/7 Duty Officer is available to respond to reports of illicit discharges by calling (505) 951-0794. EHS informed UNM employees and students about these two methods

			in various training courses and E&O events.
4.5. Establish a hotline as required in Part I.D.5.e.(i)(e): (e) Establish a hotline to address complaints from the public.	Complaints from the public can be directed to EHS, which will conduct an investigation or notify the appropriate parties.	Complaints from the public will be tracked, recorded, and reported.	EHS has a 24/7 Duty Officer program and reporting website where complaints can be reported.
4.6. Investigate suspected significant/severe illicit discharges as required in Part I.D.5.e.(i)(f); (f) Investigate suspected significant/severe illicit discharges within forty-eight (48) hours of detection and all other discharges as soon as practicable; elimination of such discharges as expeditiously as possible; and requirement of immediate cessation of illicit discharges upon confirmation of responsible parties.	EHS will investigate all suspected significant/severe illicit discharges within forty-eight (48) hours of detection and all other discharges as soon as practicable; eliminate such discharges as expeditiously as possible; and require the immediate cessation of illicit discharges upon confirmation of responsible parties.	To track illicit discharges across UNM.	A review of the investigation process was completed as part of the updates to the IDDE plan. For this reporting year: • 35 (-2% YOY) total illicit discharge investigations were conducted ○ 1 (0% YOY) was community reported; ○ 2 (+100% YOY) was from a construction site SWPPP inspection; & ○ 32 (-5% YOY) were (regular) dry day investigations. Likewise, for this reporting year: • Only 1 (-67% YOY) of those 35 investigations resulted in a written

			NOV being issued to UNM personnel for illicit discharge; • 3 investigations resulted in a corrective action conversation. • 32 (0% YOY) investigations were determined to have no illicit discharge whatsoever.
4.7. Review complaint records and develop a targeted source reduction program as required in Part I.D.5.e.(i)(g): (g) Review complaint records for the last permit term and develop a targeted source reduction program for those illicit discharge/improper disposal incidents that have occurred more than twice in two (2) or more years from different locations. (Applicable only to class A and B permittees)	EHS will maintain a log of complaint records from the last permit term and target source reduction efforts to repeat discharge incidents. EHS will investigate IDDE within 48 hours of being reported and will eliminate illicit discharges or improper disposal on campus within 30 days. If more time is needed, then EHS will develop an elimination schedule to be completed within no more than six months. EHS will track and review NOV records to identify repeat offenders to prioritize remedial training aimed at mitigating IDDE.	To identify “hot spots” for illicit discharge and repeat offenders so that the targeted source reduction program is effective.	No repeat violators were responsible for the recorded illicit discharge. The dashboard tool continues to help UNM better track, not only, all repeat offenders, but all illicit discharge.
4.8. Screening of system as required in Part I.D.5.e.(iii) as follows: (iii) The permittee must screen the entire jurisdiction at least once every five (5) years and high-priority areas	The screening will occur as part of the IDDE Plan. The screening will be done according to the schedule in the permit.	To inspect all high-priority areas and the entire jurisdiction annually.	All high-priority areas and the entire jurisdiction were visually inspected for illicit discharge this reporting year. Screening the entire jurisdiction is relatively achievable compared to

at least once every year. High-priority areas include any area where there is ongoing evidence of illicit discharges or dumping or where there are citizen complaints on more than five (5) separate events within twelve (12) months. The permittee must: (a) Include in its SWMP document a description of the means, methods, quality assurance and controls protocols, and schedule for successfully implementing the required screening, field monitoring, laboratory analysis, investigations, and analysis evaluation of data collected. (b) Comply with the dry weather screening program established in Table 6 and the monitoring requirements specified in Part III.A.2. (c) If applicable, implement the priority ranking system developed in the previous permit term.			other municipalities due to the small acreage (i.e., size) of UNM's MS4.
4.9. Develop, update, and implement a Waste Collection Program as required in Part I.D.5.e.(iv): (iv) Waste Collection Programs: The permittee must develop, update, and implement programs to collect used motor vehicle fluids (at a minimum, oil, and antifreeze) for recycling, reuse, or	UNM's Facilities Management Department's O&M program will identify waste disposal standard operating procedures (SOPs), including SOPs for motor vehicle fluids, toxic paints, solvents, fertilizers, pesticides, herbicides, and any other hazardous materials. This will include a list of opportunities for recycling substances. Also, SOPs will	To increase recycling and reuse of hazardous materials and to reduce the potential for improper disposal.	UNM's Stormwater O&M Program contains a description of waste management operations. UNM's Facilities Management Department continued to operate a waste collection program that included recycling. EHS continued to operate

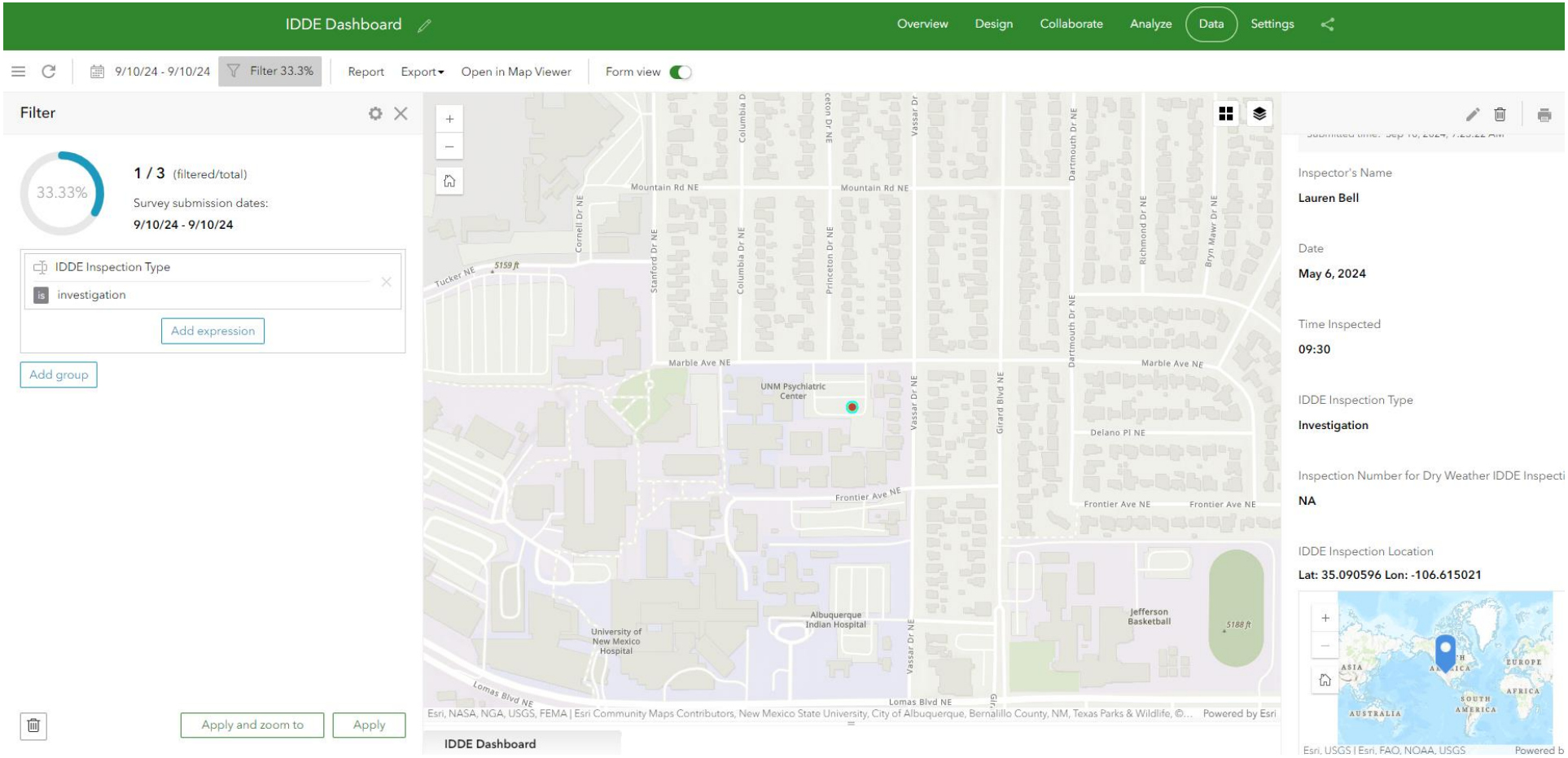
proper disposal, and to collect household hazardous waste materials (including paint, solvents, fertilizers, pesticides, herbicides, and other hazardous materials) for recycle, reuse, or proper disposal. Where available, collection programs operated by third parties may be a component of the programs. Permittees shall enhance these programs by establishing the following elements as a goal in the SWMP: A. Increasing the frequency of the collection days hosted; B. Expanding the program to include commercial fats, oils, and greases; and C. Coordinating program efforts between applicable permittee departments.	address the removal of sediments, debris, floatables, and litter, including pet wastes. This will be completed by June 20, 2017. While EHS collects and disposes of hazardous waste (per RCRA), UNM does not have a traditional household hazardous waste collection facility. Nonetheless, EHS will collect and dispose of any hazardous waste associated with UNM operations and student living.		its hazardous waste collection and disposal program across campus. See the above section on Waste Collection Programs for more details.
4.10. Develop, update and implement a Spill Prevention and Response program to prevent, contain, and respond to spills that may discharge into the MS4 as required in Part I.D.5.e.(v): (v) Spill Prevention and Response. The permittee must develop, update and implement a program to prevent, contain, and respond to spills that may discharge into the MS4. The permittees must continue existing programs while updating those	EHS has developed and regularly updates spill prevention and response programs. Specifically, EHS maintains a Spill Response Team administered by the UNM Chemical Hygiene Officer. At a minimum, all team members are trained in HAZWOPER-24. When this team determines that a spill is too large or dangerous to respond to, environmental and safety measures will be implemented to stabilize the incident until an on-call contractor can respond to manage the spill.	To implement, maintain, and expand a spill prevention and response program. To establish and maintain a Spill Response Team capable of managing spills that may discharge to the MS4.	EHS maintained spill reporting methods and a response team with on-call spill response contractors. Per 40 CFR 112, EHS continues to implement the *UNM Spill Prevention, Control, & Countermeasure (SPCC) Plan* during the reporting period. The plan is set to expire in September 2028,

programs, as necessary, to comply with the requirements of this permit. The Spill Prevention and Response program shall include: (a) Where the discharge of material resulting from a spill is necessary to prevent loss of life, personal injury, or severe property damage, the permittee(s) shall take, or ensure the party responsible for the spill takes, all reasonable steps to control or prevent any adverse effects to human health or the environment: and (b) The spill response program may include a combination of spill response actions by the permittee (and/or another public or private entity) and legal requirements for private entities within the permittee's municipal jurisdiction.	EHS will also implement and maintain UNM's Spill Prevention, Control, and Countermeasure (SPCC) Plan, per 40 CFR 112. EHS will maintain spill reporting mechanisms for the campus community. A complete review of these programs will be completed by June 20, 2017.		as it was just revised in the RY24. During the reporting period, there were no spills that had the potential to significantly impact water quality.
4.11. Enhance the program to include requirements in Part I.D.5.e.(ix): (ix) The permittee may: (a) Divide the jurisdiction into assessment areas where monitoring at fewer locations would still provide sufficient information to determine the presence or absence of illicit discharges within the larger area;	EHS identifies six primary sub-basins to monitor for illicit discharge. These basins are sub-watersheds (identified using AMAFCA's GIS data) that each discharge into other MS4s (e.g., AMAFCA, COA). Downgrading will not be performed, given that all identified high-risk areas are easily surveyed annually. UNM will rely on TAG members (i.e., a cooperative MS4 group) for additional detection and elimination of illicit discharges	An update on progress will be included in the annual report.	32 (-11% YOY) dry day inspections occurred this reporting year across UNM's six watershed basins.

(b) Downgrade high priority areas after the area has been screened at least once, and there are citizen complaints on no more than five (5) separate events within a twelve (12) month period; (c) Rely on a cooperative program with other MS4s for detection and elimination of illicit discharges and illegal dumping; (d) If participating in a cooperative program with other MS4s, required detection program frequencies may be based on the combined jurisdictional area rather than individual jurisdictional areas and may use assessment areas crossing jurisdictional boundaries to reduce the total number of screening locations (e.g., a shared single screening location that would provide information on more than one jurisdiction); and (e) After screening a non-high priority area once, adopt an "in response to complaints only" IDDE for that area, provided there are citizen complaints on no more than two (2) separate events within a twelve (12) month period. (f) Enhance the program to utilize procedures and methodologies consistent with those described in "Illicit Discharge Detection and			

Elimination, A Guidance Manual for Program Development and Technical Assessments."			
4.12. Describe other proposed activities to address the Illicit Discharges and Improper Disposal Measure:	No additional activities are being proposed at this time. UNM will continue to explore additional activities to address the Illicit Discharges and Improper Disposal Measure.	N/A	N/A

Figure 7 - Screenshot of UNM's IDDE Inspection Results Dashboard for RY24



Requirement	Plan	Goal	Status
4.1.1 Ordinance (or other control methods) as required in Part I.D.5.d.(i): (i) The permittee must control through ordinance, permit, contract, order, or similar means the contribution of pollutants to the municipal storm sewer by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi). If no such industrial activities are in a permittee's jurisdiction, that permittee may certify that this program element does not apply.	UNM does not have operations within the campus jurisdiction that would normally be categorized as industrial. UNM self-certifies that this program element does not apply.	N/A	N/A
4.2. Continue implementation and Enforcement of the Industrial and High-Risk Runoff program, assess the overall success of the program, and document both direct and indirect measurements of program effectiveness in the annual report as required in Part I.D.5.d.(ii): (ii) The permittee must continue implementation and enforcement of the Industrial and High-Risk Runoff program, assess the overall success of the program, and document both direct and indirect measurements of program effectiveness in the annual report. The program shall include: (a) A description of a program to identify, monitor, and control pollutants in stormwater discharges to the MS4 from municipal landfills; other treatment, storage, or disposal facilities for	UNM does not have operations within the campus jurisdiction that would normally be categorized as industrial. UNM self-certifies that this program element does not apply.	N/A	N/A

municipal waste (e.g., transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal, and recovery facilities; facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge the permittee(s) determines are contributing a substantial pollutant loading to the MS4. (Note: If no such facilities are in a permittee's jurisdiction, that permittee may certify that this program element does not apply.); and (b) Priorities and procedures for inspections and establishing and implementing control measures for such discharges.			
4.3. Meet the monitoring requirements in Part I.D.5.d.(iii): (iii) Permittees must comply with the monitoring requirements specified in Part III.A.4;	UNM will serve on the Technical Advisory Group (TAG) and participate in voluntary monitoring.	To encourage participation in program development and implementation.	EHS attended and participated in all of the Technical Advisory Group (TAG) meetings this reporting year. EHS continues to financially support AMAFCA's efforts in leading the (voluntary) Compliance Monitoring Cooperative (CMC) to sample for surface water contaminants in the up-stream and down-stream permit-regulated sections of the Rio Grande.
4.4. Include requirements in Part I.D.5.d.(iv): (iv) The permittee must modify the following as necessary:	UNM does not have operations within the campus jurisdiction that would normally be categorized as	N/A	N/A

(a) The list of the facilities included in the program, by category and basin; (b) Schedules and frequency of inspection for listed facilities. Facility inspections may be carried out in conjunction with other municipal programs (e.g., pretreatment inspections of industrial users, health inspections, fire inspections, etc.) but must include random inspections for facilities not normally visited by the municipality; (c) The priorities for inspections and procedures used during inspections (e.g., inspection checklist, review for NPDES permit coverage; review of stormwater pollution prevention plan; etc.); and (d) Monitoring frequency, parameters, and the entity performing monitoring and analyses (MS4 permittees or subject facility). The monitoring program may include a waiver of monitoring for parameters at individual facilities based on a "no-exposure" certification;	industrial. UNM self-certifies that this program element does not apply.		
4.5. Enhance the program to include requirements in Part I.D.5.d.(vii): (vii) The permittee may: (a) Use analytical monitoring data, on a parameter-by-parameter basis, that a facility has collected to comply with or apply for a State or NPDES discharge permit (other than this permit) so as to avoid unnecessary cost and duplication of effort;	UNM does not have operations within the campus jurisdiction that would normally be categorized as industrial. UNM self-certifies that this program element does not apply.	N/A	N/A

(b) Allow the facility to test only one (1) outfall and to report that the quantitative data also apply to the substantially identical outfalls if: A. A Type 1 or Type 2 industrial facility has two or more outfalls with substantially identical effluents, and B. Demonstration by the facility that the stormwater outfalls are substantially identical, using one or all of the following methods for such demonstration. The NPDES Stormwater Sampling Guidance Document (EPA 833-B-92-001), available on EPA's website, provides detailed guidance on each of the three options: (1) submission of a narrative description and a site map; (2) submission of matrices; or (3) submission of model matrices. (c) Accept a copy of a "no exposure" certification from a facility made to EPA under 40 CFR §122.26(g), in lieu of analytic monitoring.			
4.6. Describe other proposed activities to address the Industrial and High-Risk Runoff Measure:	UNM does not have operations within the campus jurisdiction that would normally be categorized as industrial. UNM self-certifies that this program element does not apply.	N/A	N/A

Requirement	Plan	Goal	Status
As described in Part III, A.1, permittees shall conduct wet weather monitoring to gather information on the response of receiving waters to wet weather discharges from the MS4 during both the wet season (July 1 through October 31) and dry Season (November 1 through June 30). Wet Weather Monitoring shall be conducted at outfalls, internal sampling stations, and/or in-stream monitoring locations at each water of the US that runs in each entity or entity's jurisdiction(s). Permittees may choose either Option A (individual monitoring) or Option B (cooperative monitoring program). As described in Part III A.1.b: A cooperative monitoring program will monitor waters coming into the watershed (upstream) and leaving the watershed (downstream). Include sampling for TSS, TDS, COD, BOD5, DO, oil and grease, E.coli, pH, total Kjeldahl nitrogen, nitrate plus nitrite, dissolved phosphorus, total ammonia plus organic nitrogen, total phosphorus, PCBs, and Gross alpha.	UNM and its current MS4 partners have hired the USGS to perform sample collection at five representative outfall locations. If new wet weather monitoring sites are installed, a certification that they are operational and actual monitoring at these sites will be provided by April 15, 2016. A detailed description of the monitoring scheme will be submitted for EPA and NMED approval by December 2015. Samples will be analyzed for all of the parameters in Part III A.1.b according to the schedule in Part III A.1.b for wet weather. Composite samples are collected using an automated ISCO sampling device. Grab samples are collected by USGS personnel. Temperature probes continuously record air and water temperatures. Sondes are used to monitor D.O., water temperature, and conductivity.	Provide results of the assessment in each annual report.	UNM participates in the Technical Advisory Group (TAG) and remained a signatory and financial contributor to an intergovernmental agreement with several permittees during the reporting year. Previously, TAG also provided the EPA with a monitoring plan and received a certification to start monitoring stormwater. Per that plan, Discharge Monitoring Reports (DMRs) are submitted by only one member (i.e., AMAFCA) on behalf of all TAG permittees. • It should be noted that the EPA's public-facing Enforcement and Compliance History Online (ECHO) tool does not reflect this intergovernmental agreement or its single reporting structure, which therefore **incorrectly** displays UNM as non-compliant with DMR reporting.

Monitoring for temperature at outfalls and/or Rio Grande monitoring locations. Include additional parameters from monitoring conducted under permits NMS000101, NMR040000, or/and NMR04000I, whose mean values are at or above a WQS. Sample the pollutants for a minimum of 7 storm events per location during the permit term, with at least three events during the wet season and two events in the dry season.			

Dry Weather Discharge Screening of MS4

Requirement	Plan	Goal	Status
As described in part III.A.2, the permittee shall: Identify, investigate, and address areas within its jurisdiction that may be contributing excessive levels of pollutants to the Municipal Separate Storm Sewer System as a result of dry weather discharges (i.e., discharges from separate storm sewers that occur without the direct influence of runoff from storm events, e.g., illicit discharges, allowable non-stormwater, groundwater infiltration, etc.). Due to the arid and semi-arid conditions of the area, the dry weather discharges screening program may be carried out during both the wet season (July 1 through October 31) and dry	There are no perennial streams in the Albuquerque Metropolitan area. Accordingly, the dry weather screening program serves a dual purpose as an illicit discharge screening analysis. Seventeen locations, which screen 100% of the MS4 and target industrial areas, have been chosen. Should any discharge be present in a quantity sufficient for analysis, it will be screened for BOD5, sediment, or a parameter addressing sediment (e.g., TSS or turbidity), *E. coli*, Oil	Provide results of the assessment in each annual report.	32 (-11% YOY) dry day inspections occurred this reporting year across UNM's six watershed basins.

Season (November 1 through June 30). This program may be coordinated with the illicit discharge detection and elimination program required in Part I.D.5.e. Include sufficient screening points to adequately assess pollutant levels from all areas of the MS4. Screen for, at a minimum, BOD5, sediment, or a parameter addressing sediment (e.g., TSS or turbidity), E. coli, Oil and Grease, nutrients, and any pollutant that has been identified as a cause of impairment of a waterbody receiving discharges from that portion of the MS4, including temperature. Specify the sampling and non-sampling techniques to be issued for initial screening and follow-up purposes. Sample collection and analysis need not conform to the requirements of 40 CFR Part 136; and Perform monitoring only when an antecedent dry period of at least seventy-two (72) hours after a rain event greater than 0.1 inch in magnitude is satisfied.	and Grease, and nutrients. Any discharge collected will be a grab sample.		

Discharges to Impaired Waters

Requirement	Plan	Goal	Status
6.1.1. The permittee shall control the discharges of pollutant(s) of concern to impaired waters and waters with approved TMDLs as provided in sections (i) and (ii) below and shall assess the success in controlling those pollutants. (i) Discharges to Water Quality Impaired Water Bodies with an Approved TMDL: If the permittee discharges to an impaired water body with an approved TMDL (see Appendix B of permit), where stormwater has the potential to cause or contribute to the impairment, the permittee shall include in the SWMP controls targeting the pollutant(s) of concern along with any additional or modified controls required in the TMDL and this section. The SWMP and required annual reports must include information on implementing any focused controls required to reduce the pollutant(s) of concern. (ii) Discharges Directly to Water Quality Impaired Water Bodies without an Approved TMDL: The permittee shall also determine whether the permitted discharge is direct to one or more water quality impaired water bodies where a TMDL has not yet	UNM continues to implement practices that reduce bacterial contamination of stormwater. Most of these practices have multi-purpose benefits in addition to stormwater pollution prevention and bacterial reduction. These ongoing practices involve the structural best management practices (BMPs) in the operation of facilities and grounds as well as our public education and outreach efforts. The following describes UNM's program to minimize contamination of stormwater. UNM is aware of the bacterial source tracking study in the local Middle Rio Grande watershed, which identified the various sources of animal enteric bacteria contributions. The study indicated that birds contributed the most at roughly a third of the bacteria loading. Dogs were the second largest source. Therefore, UNM's efforts have been focused on controlling bird and dog waste impacts on stormwater. (1) Pet Waste Stations - UNM's campus is open to the public, and people walk their dogs on campus. This activity is centered around the green spaces (e.g., the Duck Pond on the Central Campus and the Golf Course on North Campus). UNM's Facilities Management Department has installed and maintains pet waste disposal bag dispensers across campus. The North Campus Neighborhood Association has also been stocking shopping bags for similar purposes on the southeast corner of the North Golf Course, where many folks begin on the perimeter jogging trail. This is also a notable example of public involvement with stormwater pollution prevention on campus. (2) Bird Controls - UNM continues bird control efforts, especially related to roosting pigeons on UNM buildings. Bird control efforts range from netting at Coronado Hall's trash storage area, equipment bird skirting at the	Submission of water quality monitoring results in DMRs and Annual Reports.	UNM participates in the Technical Advisory Group (TAG) and remained a signatory and financial contributor to an intergovernmental agreement with several permittees during the reporting year. Previously, TAG also provided the EPA with a monitoring plan and received a certification to start monitoring stormwater. Per that plan, Discharge Monitoring Reports (DMRs) are submitted by only one member (i.e., AMAFCA) on behalf of all TAG permittees. • It should be noted that the EPA's public-facing Enforcement and Compliance History Online

been approved by NMED and EPA. If the permittee discharges directly into an impaired water body without an approved TMDL, the permittee shall perform certain activities (see permit for a full description of such activities).	Business Center, and bird control wires on the Electrical Engineering & Computer Engineering building window sills. UNM also has an ongoing trapping program that captures hundreds of pigeons a year on many campus rooftops or wherever there may be a roosting problem. (3) Street and Sidewalk Sweeping - UNM makes a great effort to keep the campus grounds beautiful. UNM's Facilities Management Department's efforts include regular street sweeping and sidewalk sweeping. UNM's street sweeping schedule may be among the most frequent in the metro area, and this serves to protect stormwater quality from contaminants, including bacteria-laden animal wastes on hardscaping. (4) Trash & Litter Controls - The local bacterial tracking study also indicated that humans are one of the smaller sources of bacterial contamination in stormwater. In addition to the homeless population in the metro area that may not be using bathrooms, it was recognized that leaking trash dumpsters and compactors might contribute to some of the human contamination. Therefore, lids are installed and kept closed on UNM's large trash dumpsters to keep stormwater out. The multitude of small trash receptacles along campus sidewalks, at building entrances, etc., are also always lined with trash bags and usually topped with lids that allow trash in and keep it inside. Bagging and lids also prevent wind from blowing trash out of dumpsters and receptacles. (5) Leaked Fluid - If trash compactors leak fluids, the standard practice at UNM is to absorb the leaked fluids and dispose of the absorbent with the other solid waste. Litter is picked up daily, Monday through Friday, all over campus and is disposed of properly with other solid wastes. Litter pickup includes scooping visible pet waste as well as floatables/litter. UNM notifies the COA about problems with pet wastes being left by occupants of neighboring apartment complexes who bring their dogs onto campus property to defecate.		(ECHO) tool does not reflect this intergovernmental agreement or its single reporting structure, which therefore **incorrectly** displays UNM as non-compliant with DMR reporting.

	(6) Stormwater Retention Ponds - UNM has a few stormwater retention ponds on the South Campus and on the North Campus. In addition to reducing peak flow into the local MS4, these ponds act to settle out suspended solids and expose bacteria to solar UV radiation. Solar UV disinfection and settling out suspended solids both help to reduce bacteria levels in stormwater discharged from campus. (7) Public Education and Outreach & Campus Training - Stormwater pollution prevention training will become part of UNM's Mandatory Basic Annual Safety Training (BAST) program for all UNM employees. Additionally, EHS conducts specialized stormwater pollution prevention training for UNM's Facilities Management Department employees. EHS's specialized training includes an emphasis on pet waste pickup and measures to minimize bacterial, nutrient, and sediment contamination. At UNM's Welcome Back Days event at the beginning of each semester, EHS hosts booths with handouts on stormwater pollution prevention, including pet wastes and measures to minimize bacterial contamination. EHS's website also has information on stormwater pollution prevention, including pet wastes and measures to minimize bacterial contamination. UNM continues to operate pursuant to the COA bacterial program as necessary for consistency with the E-Coli TMDL. UNM, as a Phase 1 MS4 participant in a cooperative monitoring program, continues to pay a share of the monitoring costs for stormwater monitoring work. UNM remains involved in the decisions and reports that this monitoring cooperative generates until such time when a new monitoring cooperative is formed. UNM will calculate WLA for impaired waters and may coordinate efforts with other watershed permittees.		

MCM Table 5 – Management of Construction Site Runoff

Requirement	Plan	Goal	Status
5.1 Development of an ordinance or other regulatory mechanism as required in Part I.D.5.a.(ii)(a), The program must include the development, implementation, and enforcement of, at a minimum: (a) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;	UNM does not have formal enforcement authority like traditional MS4s. Accordingly, EHS, UNM's Facilities Management Department, and UNM's Office of Planning, Design & Construction (PDC) will continue to review, revise, and enforce existing design and construction standards and guidelines, and develop new guidelines where appropriate.	Revisions to existing policy, design, or construction standards and guidelines; or the creation of new policy, design, or construction standards and guidelines that pertain to erosion and sediment control will be tracked and reported in the annual report.	EHS continues to implement its *Stormwater Guidance for UNM Staff and Contractors*. The guidance document provides rules for construction sites greater than or equal to one acre.
5.2. Develop requirements and procedures as required in Part I.D.5.a.(ii)(b) through in Part I.D.5.a.(ii)(h) (b) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices (both structural and non-structural); (c) Requirements for construction site operators to control waste such as, but not limited to, discarded	EHS and other UNM departments will continue to inform UNM contractors of requirements and review necessary documents (i.e., erosion control plan, SWPPP/eNOI application, and fugitive dust permit) during the Construction Review Process. EHS and other UNM departments will continue to oversee UNM contractors to ensure that they comply with federal and state law and contractual provisions implementing a Stormwater Pollution Prevention Plan (SWPPP).	Revisions to existing policy, design, or construction standards and guidelines; or the creation of new policy, design, or construction standards and guidelines that pertain to erosion and sediment control will be tracked and reported in the annual report. EHS and other UNM departments will maintain	During the reporting year, 5 (0% YOY) construction sites were inspected monthly by the respective owners for compliance with the EPA's 2022 Construction General Permit (CGP): 1. UNM – Football Practice Field 2. UNM – CON & PHE 3. UNMH – ACCH Tower 4. UNMH – CTC 5. UNMH- Cancer Center

building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality (see EPA guidance at http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.c). (d) Procedures for site plan review, which incorporate consideration of potential water quality impacts. The site plan review must be conducted prior to the commencement of construction activities and include a review of the site design, the planned operations at the construction site, and the planned control measures during the construction phase (including the technical criteria for selection of the control measures), and the planned controls to be used to manage runoff created after the development; (e) Procedures for receipt and consideration of information submitted by the public; (f) Procedures for a site inspection (during construction) and enforcement of control measures, including provisions to ensure proper construction, operation, maintenance, and repair. The procedures must clearly define who is responsible for site inspections; who has the authority to implement	UNM's Facilities Management Department's Environmental Services Design & Development Standard Requirements prohibit the washing of concrete trucks in an uncontrolled area and require the removal of construction debris, including concrete tailings from the site. EHS and other UNM departments will continue to review site plans and attend pre-construction review meetings to try to ensure consistency with applicable stormwater quality requirements. The plan review must occur prior to construction and focus on construction and post-construction stormwater quality measures that address likely impacts and public concerns. The site plan review must include an evaluation of opportunities for incorporating green infrastructure (GI). UNM will continue to comply with the CGP, including SWPPP preparation and eNOI application for all public projects greater than one acre. UNM continues to welcome public participation in its SWMP. The draft SWMP was published for public comment before submission to the EPA. Public comments were reviewed and addressed accordingly. The EHS Department continues to involve other UNM departments as stakeholders in the development and revision of UNM's SWMP. UNM will continue to develop inspection procedures for exterior construction sites less than 1 acre. The new procedures will include: (1) determining who is responsible for	records of documents required from contractors pertaining to Stormwater (i.e., erosion control plan, SWPP/eNOI application, and fugitive dust permit). The number of documents will be reported in the annual report. Site plan reviews and evaluation of opportunities for incorporating green infrastructure (GI) will be documented and reported in the annual report. Finalized inspection procedures for exterior construction sites less than 1 acre will be included in the annual report as an appendix. EHS will maintain records of the number of trainings offered on the SWMP and general stormwater pollution prevention (P2) basics and will report these in the annual report.	Operator inspections also occurred for all of these sites, at the schedule required by the CGP. Furthermore, the Football Practice Field and CTC successfully completed construction and submitted Notices of Termination (NOT). A Notice of Intent (NOI) was field for the Comprehensive Cancer Center. Construction at CON & PHE, and ACCH Tower has continued for the RY24. Inspection Reports, NOIs, and NOTs for each site are available for review upon request. The inspector maintained the *Certified Stormwater Inspector (CSI)* credential from the National Stormwater Center, LLC. (NPDES.com). During the reporting year, EHS reviewed site plans for the above-mentioned projects. EHS successfully requested project managers from all new construction sites to

enforcement procedures; and the steps utilized to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and the quality of the receiving water. If a construction site operator fails to comply with procedures or policies established by the permittee, the permittee may request EPA enforcement assistance. The site inspection and enforcement procedures must describe sanctions and enforcement mechanism(s) for violations of permit requirements and penalties with detail regarding corrective action follow-up procedures, including enforcement escalation procedures for recalcitrant or repeat offenders. Possible sanctions include non-monetary penalties (such as stop work orders and/or permit denials for non-compliance), as well as monetary penalties such as fines and bonding requirements; (g) Procedures to educate and train permittee personnel involved in the planning, review, permitting, and/or approval of construction site plans, inspections, and enforcement. Education and training shall also be provided for developers, construction site operators, contractors, and supporting personnel, including requiring a stormwater pollution	conducting UNM construction site stormwater quality inspections; determining who has authority to implement enforcement procedures regarding construction stormwater quality at UNM; developing a process for prioritizing sites for inspection and enforcement based on the type of construction activity; inspecting all sites greater than 1-acre at least once per month and follow up on any deficiencies to ensure corrective action; inspecting sites once project team believes final site stabilization is complete, and describing enforcement procedures and any penalties for repeated non-compliance at a UNM construction site. The leadership of PDC & FM will be engaged by EHS in the development and implementation of UNM's SWMP. Once the SWMP is finalized, training on the SWMP and general stormwater pollution prevention (P2) basics will be offered. UNM will continue its procedures for construction project record-keeping, including site reviews, inspections, inspection reports, and any enforcement letters & documents.		assess the costs, benefits, and feasibility of incorporating GI/LID. Those assessments are available upon request. Inspection procedures for construction sites less than 1 acre have been completed and are incorporated into the *Stormwater Guidance for UNM Staff & Contractors*. Operator inspections also occurred for all of these sites, at the schedule required by the CGP. The UNM SWMP was finalized and sent to PDC and UNM's Facilities Management Department and is being implemented. Training material on stormwater management and pollution prevention was finalized, and training was provided to the UNM Grounds and Landscaping Staff. Inspection procedures for construction sites less than 1 acre have been completed and are incorporated into the

prevention plan for construction sites within the permittee's jurisdiction; (h) Procedures for keeping records of and tracking all regulated construction activities within the MS4, i.e., site reviews, inspections, inspection reports, warning letters, and other enforcement documents. A summary of the number and frequency of site reviews, inspections (including inspector's checklist for oversight of sediment and erosion controls and proper disposal of construction wastes), and enforcement activities that are conducted annually and cumulatively during the permit term shall be included in each annual report;			*Stormwater Guidance for UNM Staff & Contractors*.
5.3. Annually conduct site inspections of 100 percent of all construction projects cumulatively disturbing one (1) or more acres as required in Part I.D.5.a.(iii): (iii) Annually conduct site inspections of 100 percent of all construction projects cumulatively disturbing one (1) or more acres within the MS4 jurisdiction. Site inspections are to be followed by any necessary compliance or enforcement action. Follow-up inspections are to be conducted to ensure corrective maintenance has occurred, and all projects must be inspected at	UNM will continue to develop inspection procedures for 100% of all exterior construction projects cumulatively disturbing one (1) or more acres. The new procedures will include determining who is responsible for conducting UNM construction site stormwater quality inspections; determining who has authority to implement enforcement procedures regarding construction stormwater quality at UNM; developing a process for prioritizing sites for inspection and enforcement based on the type of construction activity; inspecting all sites greater than 1-acre at least once per month and follow up on any deficiencies to ensure corrective action; inspecting sites once project team believes final site stabilization is complete, and describing enforcement procedures and	Finalized inspection procedures and the number of site inspections done will be included in the annual report as an appendix.	During the reporting year, 5 (0% YOY) construction sites were inspected monthly by the respective owners for compliance with the EPA's 2022 Construction General Permit (CGP): 1. UNM – Football Practice Field 2. UNM – CON & PHE 3. UNMH – ACCH Tower 4. UNMH – CTC 5. UNMH- Cancer Center

completion for confirmation of final stabilization.	any penalties for repeated non-compliance at a UNM construction site. The procedures will be developed, and inspections will begin no later than December 20, 2016.		These inspections were in addition to the contractor-required inspections, which are scheduled per the 2022 CGP.
5.4. Coordinate with all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private construction projects/activities within the permit area as required in Part I.D.5.a.(iv); (iv) The permittee must coordinate with all departments and boards with jurisdiction over the planning, review, permitting, or approval of the public and private construction projects/activities within the permit area to ensure that the construction stormwater runoff controls eliminate erosion and maintain sediment on site. Planning documents include, but are not limited to: comprehensive or master plans, subdivision ordinances, general land use plans, zoning codes, transportation master plans, specific area plans, such as sector plans, site area plans, corridor plans, or unified development ordinances.	EHS will continue to coordinate all UNM departments that have a role in construction activities to ensure proper controls are in place to eliminate erosion and reduce the transport of sediment from construction projects. EHS acts in an advisory role for projects under 1 acre and ensures compliance in projects 1 acre or greater. Inform UNM contractors of requirements and review necessary documents (i.e., erosion control plan, SWPP/eNOI application, and fugitive dust permit) during the Construction Review Process. EHS and other UNM departments will continue to oversee UNM contractors, ensuring that they comply with federal law, municipal ordinance, and contractual provisions and implementing a Stormwater Pollution Prevention Plan (SWPPP). EHS and other UNM departments will continue to review site plans and attend pre-construction review meetings to try to ensure consistency with applicable stormwater quality requirements. The plan review must occur prior to construction and focus on construction and post-construction stormwater quality measures that address likely impacts and public concerns. The site plan review must	UNM will include a summary of regulated construction activities in the Annual Report.	During the reporting period, EHS reviewed project planning and design documents and participated in regular construction project meetings that included construction companies, UNM's Facilities Management Department, UNM's Planning, Design and Construction (PDC) Department, UNM's Parking and Transportation Services (PATS), and other UNM departments. EHS provided input to ensure proper controls are in place to eliminate erosion and reduce the transport of sediment from construction project sites.

	include an evaluation of opportunities for incorporating green infrastructure (GI).		
5.5. Evaluation of GI/LID/Sustainable practices in site plan reviews as required in Part I.D.5.a.(v): (v) The site plan review required in Part I.D.5.a.(ii)(d) must include an evaluation of opportunities for the use of GI/LID/Sustainable practices and, when the opportunity exists, encourage project proponents to incorporate such practices into the site design to mimic the pre-development hydrology of the previously undeveloped site. For purposes of this permit, pre-development hydrology shall be met according to Part I.D.5.b of this permit. (consistent with any limitations on that capture). Include a reporting requirement of the number of plans that had opportunities to implement these practices and how many incorporated these practices.	EHS will request assessments for incorporating GI/LID into all construction sites disturbing more than or equal to one acre.	EHS will include in the Annual Report the number of opportunities to incorporate GI and the number of times GI has actually been incorporated.	EHS successfully requested project managers from all new construction sites to assess the costs, benefits, and feasibility of incorporating GI/LID. Those assessments are available upon request.
5.6. Enhance the program to include program elements in Part I.D.5.a.(viii) through Part I.D.5.a.(x): (viii) The permittee may use stormwater educational materials locally developed or provided by the	UNM will utilize its own, or when appropriate, publicly available, stormwater educational material to enhance its stormwater program. Where applicable, UNM will refer to existing local, state, and federal	EHS participated in the revision/update of the local "NPDES Stormwater Management Guideline for Construction and	UNM has used stormwater educational materials provided by the EPA and COA to enhance its stormwater education training and outreach material. UNM has also

EPA (refer to http://water.epa.gov/polwaste/npdes/swbmp/index.cUNM's Facilities Management Department, http://www.epa.gov/smartgrowth/parking.htm, http://www.epa.gov/smartgrowth/stormwater.htm), the NMED, environmental, public interest or trade organizations, and/or other MS4s. (ix) The permittee may develop or update existing construction handbooks (e.g., the COA NPDES Stormwater Management Guidelines for Construction and Industrial Activities Handbook) to be consistent with promulgated construction and development effluent limitation guidelines. (x) The construction site inspections required in Part I.D.5.a.(iii) may be carried out in conjunction with the permittee's building code inspections using a screening prioritization process.	construction handbooks and stormwater management guidelines to ensure consistency and compliance with promulgated construction and development effluent limitation guidelines.	Industrial Activities Handbook." It is now completed. UNM will include an update on educational materials in its annual report.	created its own stormwater education training and outreach material. Copies of UNM's education training and outreach material are available upon request. No changes were made to the NPDES Stormwater Management Guideline for Construction and Industrial Activities Handbook.
5.7. Describe other proposed activities to address the Construction Site Stormwater Runoff Control Measure:	No additional activities are being proposed at this time. UNM will continue to explore additional activities to address the Construction Site Stormwater Runoff Control Measure.	N/A	N/A

MCM Table 6 – Management of Post-Construction Site Runoff

Requirement	Plan	Goal	Status
6.1. Development of strategies as required in Part I.D.5.b.(ii). (a): (ii) The program must include the development, implementation, and enforcement of, at a minimum: (a) Strategies that include a combination of structural and/or non-structural best management practices (BMPs) to control pollutants in stormwater runoff.	EHS will work with other UNM departments (e.g., FM, PDC, and Parking and Transportation Services) to propose the implementation of design review and construction, as well as operation and maintenance procedures to assure structural and/or non-structural best management practices (BMPs) to control pollutants in stormwater runoff. EHS will propose the development of contractual procedures to ensure the implementation of UNM's SWMP in UNM development and redevelopment projects. By February 20, 2016, EHS will work to develop and adopt design standards, including methodology, to estimate water quality impacts and selection of controls.	Submit draft policies, procedures, guidelines, and protocols regarding stormwater quality upon completion. Submit cumulative changes in UNM's SWMP in the Annual Report.	EHS maintained and enforced the *Stormwater Guidance for UNM Staff and Contractors.* The guidance document provides rules for post-construction sites greater than or equal to one acre. For example, the guidance requires project managers to evaluate GI/LID incorporations into the project. It also requires project managers to disconnect impervious surfaces through the use of permanent BMPs. EHS continues to update it with the latest permit rules as necessary.
6.2. Development of an ordinance or other regulatory mechanism as required in Part I.D.5.b.(ii). (b): (b) An ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal, or local law. The ordinance or policy must:	EHS will work with other UNM departments to develop and adopt design standards, policy, and enforcement mechanisms for requiring on-site management of 90th percentile storm event discharge volume associated with new development sites and 80th percentile storm event discharge volume associated with redevelopment sites.	Submit finalized policies, procedures, guidelines, and protocols regarding Stormwater Quality upon completion of the finalized draft.	EHS continues to work with FM, PDC, and PATS to comply with stormwater rules and implement GI/LID on projects. EHS continues to reevaluate its estimation of the 90th and 80th percentile storm event with the most recently available data in accordance with

Incorporate a stormwater quality design standard that manages on-site the 90th percentile storm event discharge volume associated with new development sites and 80th percentile storm event discharge volume associated with redevelopment sites through stormwater controls that infiltrate, evapotranspire the discharge volume, except in instances where full compliance cannot be achieved, as provided in Part I.D.5.b.(v). The stormwater from rooftop discharge may be harvested and used on-site for non-commercial use. Any controls utilizing impoundments that are also used for flood control that are located in areas where the New Mexico Office of the State Engineer requirements at NMAC 19.26.2.15 (see also Section 72-5-32 NMSA) apply must drain within 96 hours unless the state engineer has issued a waiver to the owner of the impoundment. Options to implement the site design standard include, but are not limited to: management of the discharge volume achieved by canopy interception, soil amendments, rainfall harvesting, rain tanks and cisterns, engineered infiltration, extended filtration, dry swales, bioretention, rooftop disconnections, permeable pavement, porous concrete, permeable pavers,			the methods in “Estimating Predevelopment Hydrology in the Middle Rio Grande Watershed, New Mexico, EPA Publication Number 832-R-14-007”.

reforestation, grass channels, green roofs and other appropriate techniques, and any combination of these practices, including implementation of other stormwater controls are used to reduce pollutants in stormwater (e.g., a water quality facility). Estimation of the 90th or 80th percentile storm event discharge volume is included in EPA Technical Report entitled “Estimating Predevelopment Hydrology in the Middle Rio Grande Watershed, New Mexico, EPA Publication Number 832-R-14-007”. Permittees can also estimate: Option A: a site-specific 90th or 80th percentile storm event discharge volume using the methodology specified in the referenced EPA Technical Report. Option B: site-specific pre-development hydrology and associated storm event discharge volume using the methodology specified in the referenced EPA Technical Report.			
6.3. Ensure appropriate implementation of structural controls as required in Part I.D.5.b.(ii). (c) and Part I.D.5.b.(ii).(d):	Once developed, the post-construction program requirements will be monitored, reviewed, and revised as appropriate by EHS, with input from other departments,	In each annual report to EPA, EHS will report any changes or revisions to UNM’s	EHS maintained and enforced the *Stormwater Guidance for UNM Staff and Contractors.*

(d) The permittee must ensure that the post-construction program requirements are constantly reviewed and revised as appropriate to incorporate improvements in control techniques;	on an annual basis. A process will be put in place by June 20, 2017.	Post-Construction Program.	
6.4. Develop procedures as required in Part I.D.5.b.(ii).(e), Part I.D.5.b.(ii).(f), Part I.D.5.b.(ii).(g), and Part I.D.5.b.(ii).(h): (e) Procedure to develop and implement an educational program for project developers regarding designs to control water quality effects from stormwater, and a training program for plan review staff regarding stormwater standards, site design techniques, and controls, including training regarding GI/LID/Sustainability practices. Training may be developed independently or obtained from outside resources, i.e., federal, state, or local experts; (f) Procedures for site inspection and enforcement to ensure proper long-term operation, maintenance, and repair of stormwater management practices that are put into place as part of construction projects/activities. Procedure(s) shall include the requirement that as-built plans be submitted within ninety (90)	EHS will participate and cooperate in local experts' combined efforts to refine and present stormwater quality educational training for project developers. UNM staff (e.g., PDC, UNM's Facilities Management Department, etc.), including plan reviewers, on construction project teams, will receive such training. EHS, in conjunction with UNM's Facilities Management Department, will inspect campus stormwater management and control systems to assure long-term operation, maintenance, and repair of stormwater management and control systems. UNM contractors are already required to submit the project's as-built plans to PDC upon completion. These plans are stored in PDC's database. The number of such inspections will be mentioned in UNM's Annual Reports to EPA. UNM's Integrated Pest Management (IPM) manual applies to UNM campus-wide. UNM's Facilities Management Department will review and revise the IPM, provide more IPM-related training to employees, and seek less toxic and equally less	Provide a discussion of education and outreach activities geared toward LID implementation in the Annual Report. Provide a discussion of maintenance and inspections of stormwater control features in the Annual Report.	EHS trained 0 (-100% YOY) persons in charge of new and redevelopment projects on campus about pre and post-construction requirements regarding stormwater rules. New training was unnecessary, as peer-to-peer relationships were maintained with these persons, who demonstrated ongoing knowledge of the requirements and solicited EHS's input on projects as needed. UNM Golf Course contractors and FM's Grounds and Landscaping division staff engaged in IPM (i.e., Integrated Pest Management) activities as required to maintain licenses. As part of the

days of completion of construction projects/activities that include controls designed to manage the stormwater associated with the completed site (post-construction stormwater management). Procedure(s) may include the use of dedicated funds or escrow accounts for development projects or the adoption by the permittee of all privately owned control measures. This may also include the development of maintenance contracts between the owner of the control measure and the permittee. The maintenance contract shall include verification of maintenance practices by the owner, allows the MS4 owner/operator to inspect the maintenance practices, and perform maintenance if inspections indicate neglect by the owner; (g) Procedures to control the discharge of pollutants related to commercial application and distribution of pesticides, herbicides, and fertilizers where permittee(s) hold jurisdiction over lands not directly owned by that entity (e.g., incorporated city). The procedures must ensure that herbicides and pesticides applicators doing business within the permittee's jurisdiction have been properly trained and certified, are encouraged to use the least toxic products, and control use	expensive new approaches. EHS will work with UNM's Facilities Management Department to review their protocols for applying herbicides and fertilizers and will work to monitor the use of pesticides, herbicides, and fertilizers.		licensing process, they receive annual training on IPM. They are also required by the New Mexico Department of Agriculture to maintain detailed logs of herbicide and fertilizer applications, which are available for review upon request.

and application rates according to the applicable requirements; and (h) Procedure or system to review and update, as necessary, the existing program to ensure that stormwater controls or management practices for new development and redevelopment projects/activities continue to meet the requirements and objectives of the permit.			
6.5. Coordinate internally with all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private construction projects/activities within the permit area as required in Part I.D.5.b.(iii) (iii) The permittee must coordinate with all departments and boards with jurisdiction over the planning, review, permitting, or approval of public and private new development and redevelopment projects/activities within the permit area to ensure the hydrology associated with new development and redevelopment sites. Mimic to the extent practicable the pre-development hydrology of the previously undeveloped site, except in instances where the pre-development hydrology requirement conflicts with applicable water rights appropriation requirements. For	EHS will work with other UNM departments to develop and adopt design standards, policy, and enforcement mechanisms for requiring on-site management of 90th percentile storm event discharge volume associated with new development sites and 80th percentile storm event discharge volume associated with redevelopment sites. This will be done by December 2015.	A discussion on UNM's progress in developing and adopting such design standards, policy, and enforcement mechanisms will be included in the annual report.	The *Stormwater Guidance for UNM Staff and Contractors* requires that Persons In Charge (PICs) of UNM construction projects (regardless of department) collaborate with EHS to meet stormwater rules. Specifically, PICs must assess GI/LID installation, provide copies of SWPPPs, NOIs, and NOTs, and generally ensure the availability of or provide the resources necessary to comply with stormwater rules. EHS continues to coordinate with FM, PDC, and PATS to ensure development complies with the MS4 permit.

purposes of this permit, pre-development hydrology shall be met by capturing the 90th percentile storm event runoff (consistent with any limitations on that capture), which under undeveloped natural conditions would be expected to infiltrate or evapotranspirate on-site and result in little, if any, off-site runoff. (Note: This permit does not prevent permittees from requiring additional controls for flood control purposes.) Planning documents include, but are not limited to: comprehensive or master plans, subdivision ordinances, general land use plans, zoning codes, transportation master plans, specific area plans, such as sector plan, site area plans, corridor plans, or unified development ordinances.			
6.6. As required in Part I.D.5.b.(iv), the permittee must assess all existing codes, ordinances, planning documents, and other applicable regulations for impediments to the use of GI/LID/Sustainable practices: (iv) The permittee must assess all existing codes, ordinances, planning documents, and other applicable regulations for impediments to the use of GI/LID/Sustainable practices. The assessment shall include a list of the identified impediments,	Again, UNM does not have formal ordinances or enforcement authority like many other MS4s. EHS will work with other UNM departments to assess facility planning and design procedures.	To remove impediments to GI/LID installation.	EHS continued to work with UNM's Facilities Management Department and PDC to discuss potential GI/LID features for current and upcoming projects. EHS has reviewed multiple projects during the reporting period, incorporating infiltration and water harvesting into

necessary regulation changes, and recommendations and proposed schedules to incorporate policies and standards to relevant documents and procedures to maximize infiltration, recharge water harvesting, improve habitat, and hydrologically manage stormwater runoff as allowed under the applicable water rights appropriation requirements. The permittee must develop a report of the assessment findings, which is to be used to provide information to the permittee on the regulation changes necessary to remove impediments and allow implementation of these practices.			remodels and new construction.
6.7. As required in Part I.D.5.b.(iv), describe the plan to report the assessment findings on GI/LID/Sustainable practices	Assessment findings will be tracked, recorded, and summarized in each annual report after March 20, 2017.	To identify impediments to GI/LID implementation so they can be remedied.	EHS began tracking GI/LID assessments and requesting data about the largest hurdles to implementing GI/LID. Results show project managers' biggest hurdle is cost and infeasibility, not regulation or policy.
6.8. Estimation of the number of acres of IA and DCIA as required in Part I.D.5.b.(vi): (vi) The permittee must estimate the number of acres of impervious area	By June 20, 2017, EHS will calculate and update an estimate of the acreage of impervious areas (IA) and directly connected impervious areas (DCIA). UNM may report the acreages of IA and DCIA in a tabular format to	Estimation of campus IAs and DCIA removed or added in the Annual Report.	This process has been completed. There are 576.3 acres of impervious area and 681.7 acres of permeable area at UNM. The majority of UNM's

(IA) and directly connected impervious area (DCIA). For the purpose of his part, IA includes conventional pavements, sidewalks, driveways, roadways, parking lots, and rooftops. DCIA is the portion of IA with a direct hydraulic connection to the permittee's MS4 or a waterbody via continuous paved surfaces, gutters, pipes, and other impervious features. DCIA typically does not include isolated impervious areas with an indirect hydraulic connection to the MS4 (e.g., swale or detention basin) or that otherwise drain to a pervious area.	EPA and describe the methodology used to calculate the acreages.		impervious area has a direct hydraulic connection to the MS4 and can therefore be considered DCIA. The assessment report is available upon request. EHS will continue to provide IA and DCIA estimates for upcoming projects.
2.9. Inventory and priority ranking as required in section in Part I.D.5.b.(vii): (vii) The permittee must develop an inventory and priority ranking of MS4-owned property and infrastructure (including public right-of-way) that may have the potential to be retrofitted with control measures designed to control the frequency, volume, and peak intensity of stormwater discharges to and from its MS4. In determining the potential for retrofitting, the permittee shall consider factors such as the complexity and cost of implementation, public safety, access for maintenance purposes, subsurface geology, depth to the water table, proximity to aquifers and	By June 20, 2018, EHS will complete an inventory and rank campus property and MS4 infrastructure that may have the potential to be retrofitted with control measures to improve stormwater quality. Factors such as implementation cost, public safety, maintenance access, geology, depth to groundwater/aquifer, proximity to other infrastructure (e.g., sanitary sewer & septic systems), opportunities for public use, and education should be considered in the priority ranking of potential retrofit projects.	An annual report on what retrofitting work has been completed will be made available beginning in the 2017 Annual Report, and such reporting will continue in each subsequent Annual Report.	This process is ongoing. An inventory of UNM's storm drain system is shown in UNM's Campus Utility Maps prepared by UNM's Facilities Management Department. In 2015 FM's Engineering division hired an engineering firm to study these topics. The final reports titled: *UNM Drainage Study: Popejoy Hall and Woodward Lecture Hall Drainage issues* and *UNM Drainage Study: Science and Math Learning Center Area Drainage issues* identify and recommend several

subsurface infrastructure, including sanitary sewers and septic systems, and opportunities for public use and education under the applicable water right requirements and restrictions. In determining its priority ranking, the permittee shall consider factors such as schedules for planned capital improvements to storm and sanitary sewer infrastructure and paving projects; current storm sewer level of service, and control of discharges to impaired waters, streams, and critical receiving water (drinking water supply sources);			GI/LID and BMP options to reduce flow and improve water quality. FM's Grounds and Landscaping division has also identified and retrofitted UNM storm drain inlets with smaller size grates to reduce the amount of debris flowing into the storm drains.
6.10. Incorporate watershed protection elements as required in Part I.D.5.b.(viii): (viii) The permittee must incorporate watershed protection elements into relevant policy and/or planning documents as they come up for regular review. If a relevant planning document is not scheduled for review during the term of this permit, the permittee must identify the elements that cannot be implemented until that document is revised and provide EPA and NMED with a schedule for incorporation and implementation not to exceed five years from the effective date of this permit. As applicable to each permittee's MS4 jurisdiction, policy and/or planning documents must include the following:	By June 20, 2017, EHS will work to research and develop watershed protection measures and propose their incorporation into UNM policy and planning documents as they come up for review for renewal. Such policy and planning documents will include: (1) A description of UNM's master planning and project planning procedures to control the discharge of pollutants into the MS4. (2) Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within the campus by controlling the creation and expansion of such during development and re-development. (3) Identify any environmentally or ecologically sensitive areas that	All new proposed watershed protection measures will be discussed in the annual report.	UNM's written Stormwater Operations and Maintenance Plan describes UNM's stormwater management practices that minimize water quality impacts on streams. Using resources (such as the engineering reports cited earlier in this report and EPA's *Handbook for Developing Watershed Plans to Restore and Protect Our Waters* and *Community Solutions for Stormwater Management: A Guide for Voluntary Long-Term Planning*), EHS has identified watershed protection

(a) A description of master planning and project planning procedures to control the discharge of pollutants to and from the MS4. (b) Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within each watershed by controlling the unnecessary creation, extension, and widening of impervious parking lots, roads, and associated development. The permittee may evaluate the need to add an impervious surface on a case-by-case basis and seek to identify alternatives that will meet the need without creating the impervious surface. (c) Identify environmentally and ecologically sensitive areas that provide water quality benefits and serve critical watershed functions within the MS4 and ensure requirements to preserve, protect, create and/or restore these areas are developed and implemented during the plan and design phases of projects in these identified areas. These areas may include but are not limited to critical watersheds, floodplains, and areas with endangered species concerns and historic properties. Stakeholders shall be consulted as appropriate.	provide water quality benefits or serve critical watershed functions. Requirements may be needed to protect such if there is a technical basis to justify the actual existence of any such areas on campus. Inviting stakeholder input may be required for identifying sensitive areas. (4) No streams exist on campus. Should UNM acquire and develop a stream-side property, then measures will be taken to disconnect direct discharge to the stream from impervious areas. (5) UNM will seek to avoid hydro-modification of arroyos caused by campus development, including roads, etc. (6) UNM will develop and implement development policies to protect soils and prevent topsoil stripping and soil compaction. (7) UNM will continue to incorporate watershed protection elements into relevant policy and/or planning documents as they come up for regular review.		measures that could be incorporated into UNM's master planning documents. Upcoming revisions include FM's engineering design guidelines in addition to the UNM 2040 master plan.

(d) Implement stormwater management practices that minimize water quality impacts to streams, including disconnecting direct discharges to surface waters from impervious surfaces such as parking lots. (e) Implement stormwater management practices that protect and enhance groundwater recharge as allowed under the applicable water rights laws. (f) Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges. (g) Develop and implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils. (h) The program must be specifically tailored to address local community needs (e.g., protection of drinking water sources, reduction of water quality impacts) and must be designed to attempt to maintain pre-development runoff conditions.			
6.11. Enhance the program to include program elements in Part I.D.5.b.(xi) and Part I.D.5.b.(xii):	UNM will continue to participate in locally-based watershed planning efforts, such as the stormwater Technical Advisory Group (TAG) and the Middle Rio Grande Urban		During the reporting period, EHS participated in TAG meetings and discussions with the

(xii) When choosing appropriate BMPs, the permittee may participate in locally-based watershed planning efforts, which attempt to involve a diverse group of stakeholders, including interested citizens. When developing a program that is consistent with this measure's intent, the permittee may adopt a planning process that identifies the municipality's program goals (e.g., minimizing water quality impacts resulting from post-construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures.	Waters Partnership, and work to incorporate ideas from these efforts into its Stormwater management program.		Compliance Monitoring Cooperative.
6.12. Describe other proposed activities to address the Post-Construction Stormwater Management in New Development and Redevelopment Measure:	No additional activities are being proposed at this time. UNM will continue to explore additional activities to address the Post Construction Stormwater Management in New Development and Redevelopment Measure.	N/A	N/A

MCM Table 7 – Going Above & Beyond the 6 Established MCMs

Requirement	Plan	Goal	Status
7.1. None.	UNM will continue to exceed the six Minimum Control Measures (MCMs), however feasible.	To further reduce stormwater pollution.	Enterprise Builders submitted NOI to EPA for new construction of Comprehensive Cancer Center. Construction began. POC submitted NOT to EPA for the redevelopment of CTC building. EHS conducted a final inspection to verify NOT compliance; result - pass. The UNM SWMP Administrator attended and completed the National Stormwater Center's seminar, "The Importance of Performance in Stormwater: A National Perspective and Local Considerations." (1.5 hours). The UNM SWMP Administrator attended and completed the National Stormwater Center's seminar, "Hydrology of Stormwater" (1.5 hours). EHS published the Draft Annual SW Report and aired an ad with Daily Lobo + published flyers around campus.

Appendix 1 - Wet Weather Stormwater Monitoring

On the remaining pages, shared data from the TAG (Technical Advisory Group) are displayed to fulfill the cooperative compliance monitoring requirement, as outlined in the permit.

Appendix 2 - Dry Weather Stormwater Monitoring

On the remaining pages, shared data from the TAG (Technical Advisory Group) are displayed to fulfill the cooperative compliance monitoring requirement, as outlined in the permit.

Bohannan Huston
great people supporting great communities

7500 Jefferson Street NE
Albuquerque, NM 87109
505.823.1000
bhinc.com

MEMORANDUM

DATE: 9/6/2024

TO Patrick Chavez, AMAFCA

FROM: Sarah Ganley, PE, ENV-SP
Savannah Maynard
Emma Adams, EI

SUBJECT: **CMC Dry Season, Wet Weather Stormwater Monitoring**
Data Verification, Analysis Results Database, and Reporting Memo
FY 2024 Dry Season (Nov. 1, 2023 to June 30, 2024)

NOTIFICATION OF IN-STREAM WATER QUALITY EXCEEDANCES

For downstream notification purposes, the following parameters for in-stream samples taken in the Rio Grande for the FY 2024 dry season had results that exceeded applicable water quality standards (WQSs) for four (4) samples of E. coli, two (2) samples of polychlorinated biphenyls (PCBs), and one (1) sample of dissolved copper. Table 1 summarizes the samples and the applicable WQSs that were exceeded. Additional details on the sampling results shown in Table 1 are provided in this memo. In addition, this memo includes a discussion of two (2) sample results with dissolved oxygen (DO) that were below WQSs, likely due to composite field-testing.

Table 1: Parameters Detected Above Applicable Water Quality Standards
CMC FY 2024 Dry Season Monitoring

Sampling Date Location	Parameters, Applicable Water Quality Standard (WQS), and Results Exceeding Applicable WQS		
	E. coli	**PCBs**	**Dissolved Copper**
	WQS: 88 MPN (CFU/100 mL) Pueblo of Isleta Primary Contact Ceremonial & Recreational	**WQS: 0.00017 ug/L** Pueblo of Isleta Human Health Criteria (based on fish consumption only)	**WQS: Acute / Chronic: 8 ug/L / 12 ug/L** Aquatic Life Acute/Chronic Values are based on a hardness for Pueblo of Isleta, Pueblo of Sandia and New Mexico WQSs
12/14/2023 Rio Grande South Isleta Dam	Exceeded 235.9 MPN (CFU/100 mL)	Exceeded 0.0002908 ug/L	No Exceedance
6/26/2024 Rio Grande North Angostura	Exceeded 108 MPN (CFU/100 mL)	No Exceedance	No Exceedance
6/26/2024 Rio Grande at Alameda	Exceeded 97 MPN (CFU/100 mL)	Not Tested	Not Tested
6/27/2024 Rio Grande South Isleta Dam	Exceeded 644 MPN (CFU/100 mL)	Exceeded 0.000323 ug/L	Exceeded 10 ug/L

OVERVIEW OF STORMWATER MONITORING ACTIVITY

Bohannan Huston, Inc. (BHI) has been tasked to perform water quality services for the Compliance Monitoring Cooperative (CMC) Stormwater Data Verification, Database, and Reporting for the Dry Season, Wet Weather Stormwater Quality Monitoring Program for Fiscal Year (FY) 2024 (Nov. 1, 2023 to June 30, 2024). The scope of work for this task includes data verification of the stormwater laboratory analysis results, compiling the analysis results into a database, and calculating the E. coli loading to compare with the Waste Load Allocation (WLA) for qualifying storm events. The stormwater compliance monitoring was conducted separately by Daniel B. Stephens & Associates, Inc. (DBS&A) and is not a part of this BHI task. This task is being conducted to assist the CMC members with their comprehensive

monitoring and assessment program for compliance under the 2014 Middle Rio Grande (MRG) Watershed Based Municipal Separate Storm Sewer System (MS4) Permit, NPDES Permit No. NMR04A000 ("WSB MS4 Permit").

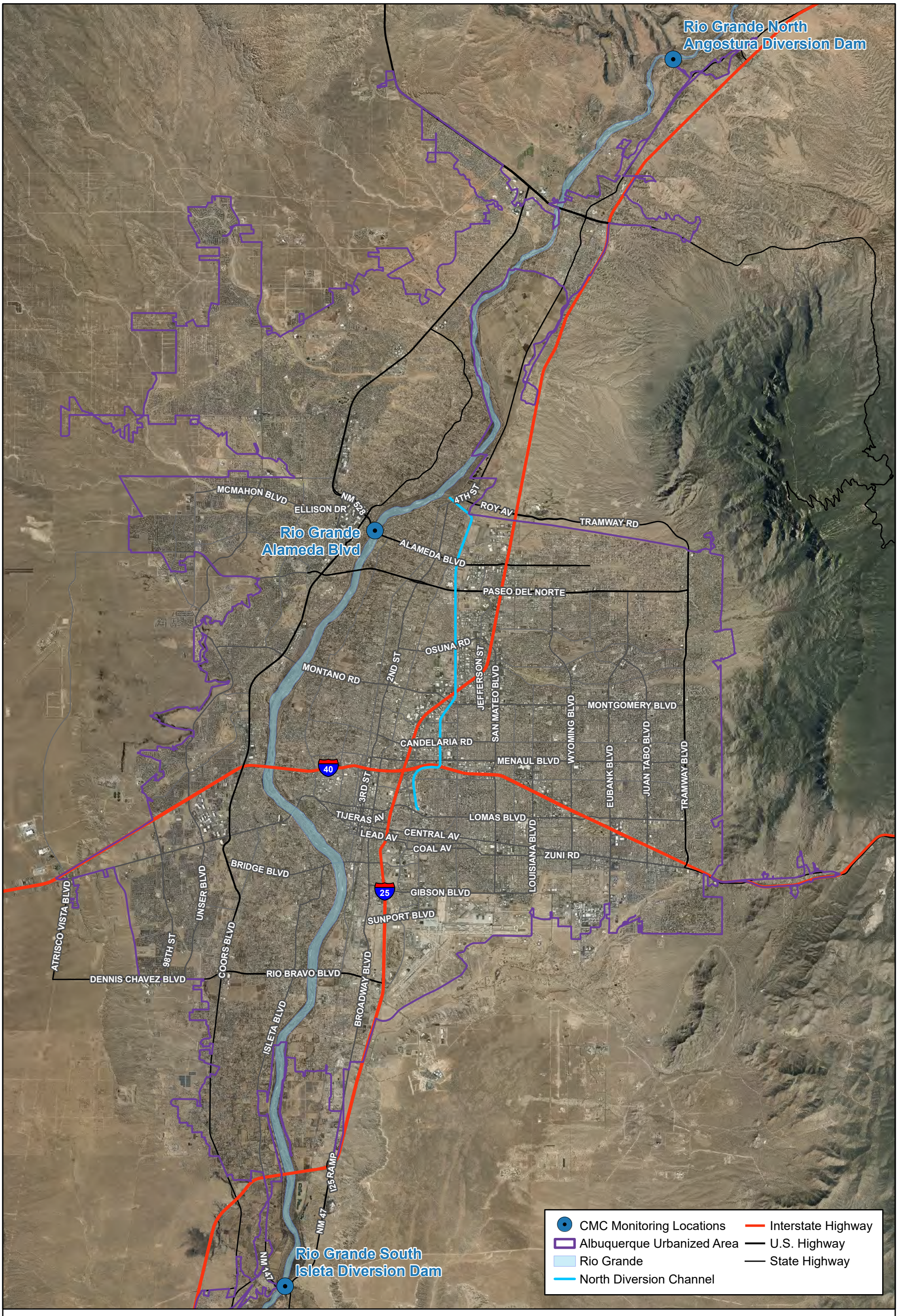
The WSB MS4 Permit entered Administrative Continuance in December 2019 when U.S. Environmental Protection Agency (EPA) Region 6 did not issue a new MS4 Permit before the current WSB MS4 Permit's expiration date. The MRG Technical Advisory Group (TAG) sent EPA a letter dated October 15, 2019, acknowledging Administrative Continuance after the expiration date of the 5-year WSB MS4 Permit term. Until a new WSB MS4 Permit is issued, there are no compliance monitoring requirements for the CMC in the Rio Grande. As identified in the WSB MS4 CMC Monitoring Plan, the WSB MS4 Permit required a minimum of seven (7) storm events be sampled at both the Rio Grande North and Rio Grande South locations (refer to Figure 1, page 4). All MS4 Permit required samples have been obtained by the CMC, as well as six (6) additional samples obtained during Administrative Continuance (FY 2021 through FY 2024); all 13 CMC samples are summarized in Table 2 below.

Table 2: CMC Sample Summary
Compared to WSB MS4 Permit Requirements

Storm Events Required to Sample	CMC-WSB MS4 Permit Required Samples per Season	FY (Date) Samples Obtained for CMC
1	#1 Wet Season	FY 2017 (8/10/2016)
2	#2 Wet Season	FY 2017 (9/12/2016)
3	#3 Wet Season	FY 2017 (9/21/2016)
4	#1 Dry Season	FY 2017 (11/21/2016)
5	#2 Dry Season	FY 2019 (3/13/2019)
6	Any Season	FY 2018 (Wet Season - 7/27/2017)
7	Any Season	FY 2018 (Wet Season - 9/27/2017)
Not Required	Wet Season	FY 2021 (10/28/2020)
Not Required	Dry Season	FY 2021 (4/28/2021)
Not Required	Wet Season	FY 2022 (9/1/2021)
Not Required	Wet Season	FY 2023 (10/5/2022)
Not Required	Dry Season	FY 2024 (12/14/2023)
Not Required	Dry Season	FY 2024 (6/26/2024)

During the WSB MS4 Permit Administrative Continuance, the CMC members chose to continue sampling within the Rio Grande to support their MS4 program needs and gather additional data in support of the future WSB MS4 Permit compliance. This memo reports on the wet weather stormwater monitoring activity for the FY 2024 dry season (Nov. 1, 2023 to June 30, 2024).

The CMC Excel database was updated with the FY 2024 dry season monitoring data as results were received. The database contains sample location, sample date, analyses conducted, methods used, applicable surface WQSs, WSB MS4 Permit required Minimum Qualification Levels (MQLs) and results.



AMAFCA

Bohannan Huston
www.bhinc.com
800.877.5332

N

0 6,250 12,500 25,000 Feet

1 inch = 12,500 feet

CMC Monitoring

Figure 1
Monitoring Locations

P:\20240355\GIS\Projects\20240355_CMCMonitoring_Figures\20240355_CMCMonitoring_Figures.aprx
Author: mcrooks

September 2024

SUMMARY OF THE CMC SAMPLING PLAN

Sampling Parameters:

Samples from both the Rio Grande North and Rio Grande South monitoring locations were analyzed for the parameters defined in the EPA approved WSB MS4 CMC Monitoring Plan, May 5, 2016. The parameter list for both locations, which is intended to characterize stormwater discharges into the river, is as follows:

Total Suspended Solids (TSS)
Total Dissolved Solids (TDS)
Chemical Oxygen Demand (COD)
Biological Oxygen Demand – 5-day (BOD_5)
Dissolved Oxygen (DO)
Oil & grease (N-Hexane Extractable Material)
E. coli
pH
Total Kjeldahl Nitrogen (TKN)
Nitrate plus Nitrite
Dissolved Phosphorus
Ammonia as Nitrogen
Nitrogen (Total Nitrogen)
Phosphorous (Total Phosphorous)
Polychlorinated Biphenyls (PCBs - Method 1668A)
Gross Alpha, adjusted
Tetrahydrofuran
Benzo(a)pyrene
Benzo(b)fluoranthene (3, 4 Benzofluoranthene)
Benzo(k)fluoranthene
Chrysene
lndeno (1 ,2,3-cd) Pyrene
Dieldrin
Pentachlorophenol
Benzidine
Benzo(a)anthracene
Dibenzofuran
Dibenzo(a, h)anthracene
Chromium VI (Hexavalent)
Dissolved Copper
Dissolved Lead
Bis (2-ethylhexyl) phthalate
Conductivity
Temperature
Hardness (as $CaCO_3$)
Per-and polyfluoroalkyl substances, known as PFAS

Hardness (as $CaCO_3$) was added to the parameter list to allow dissolved metal results to be compared to the applicable WQSs. Per the WSB MS4 Permit, DO, pH, conductivity, and temperature are required by to be analyzed in the field during sample collection, which was conducted by DBS&A, within 15 minutes of sample collection. All E. coli samples were submitted to the laboratory within eight (8) hours of collection in order to meet the specified hold time. Testing for PFAS was added to the parameter list by the CMC in 2024, and the June 2024 sample included PFAS testing.

Sampling Locations:

The sampling locations are shown in Figure 1, page 4.

Rio Grande North – In-stream sampling within the Rio Grande was performed upstream of the Angostura Diversion Dam at the north end of the watershed. The location is upstream of all inputs from the Urban Area (UA) to the river and provides the background water conditions.

Rio Grande South – In-stream sampling within the Rio Grande was performed at the Isleta Bridge at the south end of the watershed. The location is downstream of all inputs from the UA to the river and provides the downstream water conditions. These locations have been accepted by EPA and the New Mexico Environment Department (NMED) to meet the WSB MS4 Permit requirements in Part III.A.

During this FY 2024 dry season, two (2) E. coli samples were collected within the Rio Grande at Alameda Blvd. This is the location of the NMED defined stream segment divide (refer to Figure 6). This sample point was added after discussion with NMED in February 2017, regarding potential refinements to E. coli loading calculations.

Sample Collection:

As mentioned previously, sample collection for the CMC was conducted by DBS&A (through a separate on-call contract). Since BHI was not involved in the sample collection, this task and memo do not address the details of the methodologies regarding sampling, determining if an event was a qualifying storm event, or determining the timing of the hydrograph at the Rio Grande Alameda and Rio Grande South locations.

DBS&A provided BHI their field notes and field sample data (temperature, DO, specific conductivity, and pH) for the FY 2024 dry season sampling. AMAFCA provided BHI the completed laboratory analysis reports from Eurofins Environment Testing for this monitoring season.

Quality Assurance Project Plan (QAPP):

AMAFCA provided BHI with the Draft Quality Assurance Project Plan (QAPP) for the CMC, dated June 14, 2016. DBS&A followed this QAPP during sample collection. BHI used this QAPP and the included standard operating procedures (SOPs) for the data verification and validation.

MONITORING ACTIVITY & LAB ANALYSIS SUMMARY

The list below provides a summary of the CMC comprehensive monitoring program activities completed for the FY 2024 dry season from November 2023 through June 2024. Two (2) qualifying storm events were sampled and analyzed during the FY 2024 dry season.

- **December 13-14, 2023 – Qualifying Storm Event.** Samples were collected December 13, 2023, at the Rio Grande North and Alameda Blvd. locations beginning at 12:00 p.m. and 1:25 p.m., respectively. These samples were sent to the laboratory for E. coli testing. The CMC determined that the storm event beginning December 13, 2023 was a qualifying storm event. A Rio Grande South sample was collected beginning at 2:45 p.m. on December 14. The samples from the North (collected December 13) and South (collected December 13) locations were taken to Eurofins Environment Testing for full parameter testing.
- **June 26-27, 2024 – Qualifying Storm Event.** Samples were collected June 26, 2024 at the Rio Grande North and Alameda Blvd. locations beginning at 3:05 p.m. and 4:28 p.m., respectively. These samples were sent to the laboratory for E. coli testing. The CMC determined that the storm event beginning June 26, 2024 was a qualifying storm event. A Rio Grande South Sample was collected at 1:10 p.m. on June 27, 2024. The samples from the North (collected June 26) and South (collected June 27) were taken to Eurofins Environment Testing for full parameter testing.

STORMWATER QUALITY DATABASE FOR CMC

As stated previously, there were two (2) qualifying storm events during the FY 2024 dry season, wet weather monitoring sampled by the CMC, which occurred December 13-14, 2023 and June 26-27, 2024. DBS&A's field notes containing DO, pH, conductivity, and temperature measurements, as well as sampling comments have been received, and field results have been added to the database. Additionally, the Eurofins Environment Testing reports for the corresponding time period have been received, added to the database, and are provided with this memo (Attachment 1). The laboratory reports attached to this memo have BHI added comments including the field parameter measurements and other relevant notes related to the laboratory report.

Database Data Entry:

The CMC Excel database was updated with the FY 2024 dry season, wet weather monitoring data. The database contains sample locations, sample date, analyses conducted, methods used, applicable surface water quality standards (WQSs), WSB MS4 Permit required Minimum Quantification Levels (MQL), and analysis results. The database was updated under this task to include the Rio Grande at Alameda sample location. Applicable surface WQSs found in New Mexico Administrative Code (NMAC) 20.6.4, as well as the Pueblo of Isleta WQSs, are entered in the Excel database for comparison purposes with testing results. There is an indicator in the database to show if the monitoring results exceed the applicable surface WQS. An exceedance is not a violation of the WSB MS4 Permit, as the Permit does not have numeric discharge limitations. These ">WQ Standard" flags simply and quickly show the CMC members where the results of the lab data exceed the applicable WQS.

Water quality data was entered into the database upon receipt of the lab reports. All data entered into the database is initially denoted with a "P" to indicate that it is provisional and has not been through the verification and validation process yet. Full parameter analyses of qualifying storm events for both Rio Grande North and Rio Grande South locations were entered respectively into the database. The E. coli only samples from the Rio Grande Alameda location were also entered into the database.

Data Verification and Validation:

The Eurofins Environment Testing analysis reports were provided to BHI by AMAFCA. The lab reports also contain the Chain of Custody for the submitted samples. Field data was requested by and provided to BHI by DBS&A. Data verification and validation (V&V) was conducted by BHI on all field notes, lab reports, and Chain of Custody documents in accordance with the CMC WQS Operating Procedure (SOP) #2, which is part of the existing CMC QAPP Draft, June 14, 2016. These procedures are based on EPA Guidance for Environmental Data Verification and Validation (EPA, 2008).

As stated in the QAPP, the V&V process was completed by a different person than the one who entered the data into the database. The V&V process included use of the *Data Verification and Validation Worksheet* (provided in the QAPP). For this task, field data was verified first, confirming all field notes were complete. BHI handled field parameter questions directly with DBS&A. Chemical data verification began as soon as the lab reports were received, checking that all parameters were tested and looking for any obvious exceedances of WQSs. Other steps listed on the *Data Verification and Validation Worksheet* were completed after all data from the laboratory was received and entered into the database. Sample blank results were reviewed to identify potential contamination during field processing or transport. Replica/duplicate samples were evaluated based on relative percent difference (as described in more detail in the QAPP) to determine the variability of the samples.

All CMC FY 2024 dry season data met the appropriate QA/QC requirements for the December 2023 samples. For the June 2024 samples, the lab reports did not provide results for ammonia or Benzo[a]pyrene. In addition, the June 26-27, 2024 samples had some QA/QC issues, which are documented in the lab reports in Attachment 1 as well as in the data V&V worksheets in Attachment 2. If any data did not meet the appropriate QA/QC requirements, it was assigned an appropriate laboratory qualifier or validation code. A summary of validation codes is provided in the QAPP as well as in the lab reports in Attachment 1.

Once the V&V process was completed, the worksheets were signed. Copies of the V&V worksheets are provided with this memo (Attachment 2). In the database, data that was checked during the V&V process was then changed from being denoted with a "P" for provisional to a "V" for verified, and laboratory qualifiers were added, as needed.

CMC FY 2024 DRY SEASON ASSESSMENT AND EVALUATION OF MONITORING RESULTS

The EPA approved WSB MS4 CMC Monitoring Plan, May 5, 2016, has 33 parameters to monitor at the Rio Grande North and Rio Grande South monitoring locations. This does not include PFAS, which is a new parameter the CMC chose to add. Of these 33 parameters, 15 parameters were not detected in the FY 2024 dry season samples at either the Rio Grande North or South locations. Refer to Table 3 for a list of the parameters that were not detected.

Table 3: Parameters Not Detected
CMC FY 2024 Dry Season Monitoring

Parameters Not Detected	
Oil and Grease (N-Hexane Extractable Material)	Dissolved Lead
Tetrahydrofuran	Dieldrin
Benzo(b)fluoranthene (3, 4 Benzofluoranthene)	Pentachlorophenol
Benzo(k)fluoranthene	Benzidine
Chrysene	Benzo(a)anthracene
Indeno (1,2,3-cd) Pyrene	Dibenzofuran
Bis (2-ethyhexyl) Phthalate (other names: Di(2-ethylhexly)phthalate, DEHP)	Dibenzo(a,h)anthracene
	Chromium VI (Hexavalent)

For the remaining parameters on the CMC monitoring parameter list, three (3) parameters (E. coli, PCBs, and Dissolved Copper) had exceedances of the applicable surface WQS found in New Mexico Administrative Code (NMAC) 20.6.4 and the Pueblo of Isleta WQS during the FY 2024 dry season. Additionally, two (2) samples were showing dissolved oxygen (DO) below WQSs. All exceedances are discussed below in further detail.

E. coli:

The E. coli results collected during the FY 2024 dry season are summarized in Table 4.

Table 4: E. coli Results
CMC FY 2024 Dry Season Monitoring

Date – Rio Grande Location	E. coli Results MPN (CFU/100 mL)
December 13, 2023 – Rio Grande North, Isleta Dam	20
December 13, 2023 – Rio Grande at Alameda	55.6
December 14, 2023 – Rio Grande South, Isleta Dam	235.9
June 26, 2024 – Rio Grande North Angostura	108
June 26, 2024 – Rio Grande at Alameda	97
June 27, 2024 – Rio Grande South, Isleta Dam	644

At the Rio Grande North location (upstream of the Albuquerque UA, at the Angostura Diversion Dam), two (2) samples were collected and tested for E. coli. The lab results for the December 13, 2023 sample showed that the sample had an acceptable E. coli concentration, below the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL). The E. coli result on June 26, 2024 exceeded the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL).

At the Rio Grande South location (downstream of the MS4 UA), two (2) samples were collected and tested for E. coli. The December 14, 2023 sample exceeded the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL) but was below the primary contact-single sample NMAC WQS (410 CFU/100 mL). The June 27, 2024 sample exceeded both the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL) and the primary contact-single sample NMAC WQS (410 CFU/100 mL).

In addition, the CMC collected two (2) E. coli samples in the Rio Grande at Alameda Blvd. during the FY 2024 dry season. The Alameda Blvd. analysis point was based on discussions with NMED in February 2017 on collecting actual E. coli data at the stream segment divide verses using an area percentage (as defined in the TMDL) for E. coli loading calculations. The lab results showed that the sample had an acceptable E. coli concentration below the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL) and the primary contact-single sample NMAC WQS (410 CFU/100 mL) for the December 13, 2023 sample. But for the June 26, 2024 sample, the lab results showed that the sample slightly exceeded the primary contact-single sample Pueblo of Isleta WQS (88 CFU/100 mL) but was below the primary contact-single sample NMAC WQS (410 CFU/100 mL).

As a reminder, in January 2017 the CMC members clarified with NMED that the units MPN/100 mL and CFU/100 mL are considered to be interchangeable for the purposes of this stormwater quality monitoring reporting. The New Mexico and Pueblo of Iselta WQSs for E. coli are currently in units of CFU/100 mL, while the lab reports are typically in units of MPN/100mL. The graph presented in this section uses units of CFU/100 mL to be consistent with the WQS units. Refer to Figure 2 for a graphical representation of E. coli results from December 2023 through June 2024.

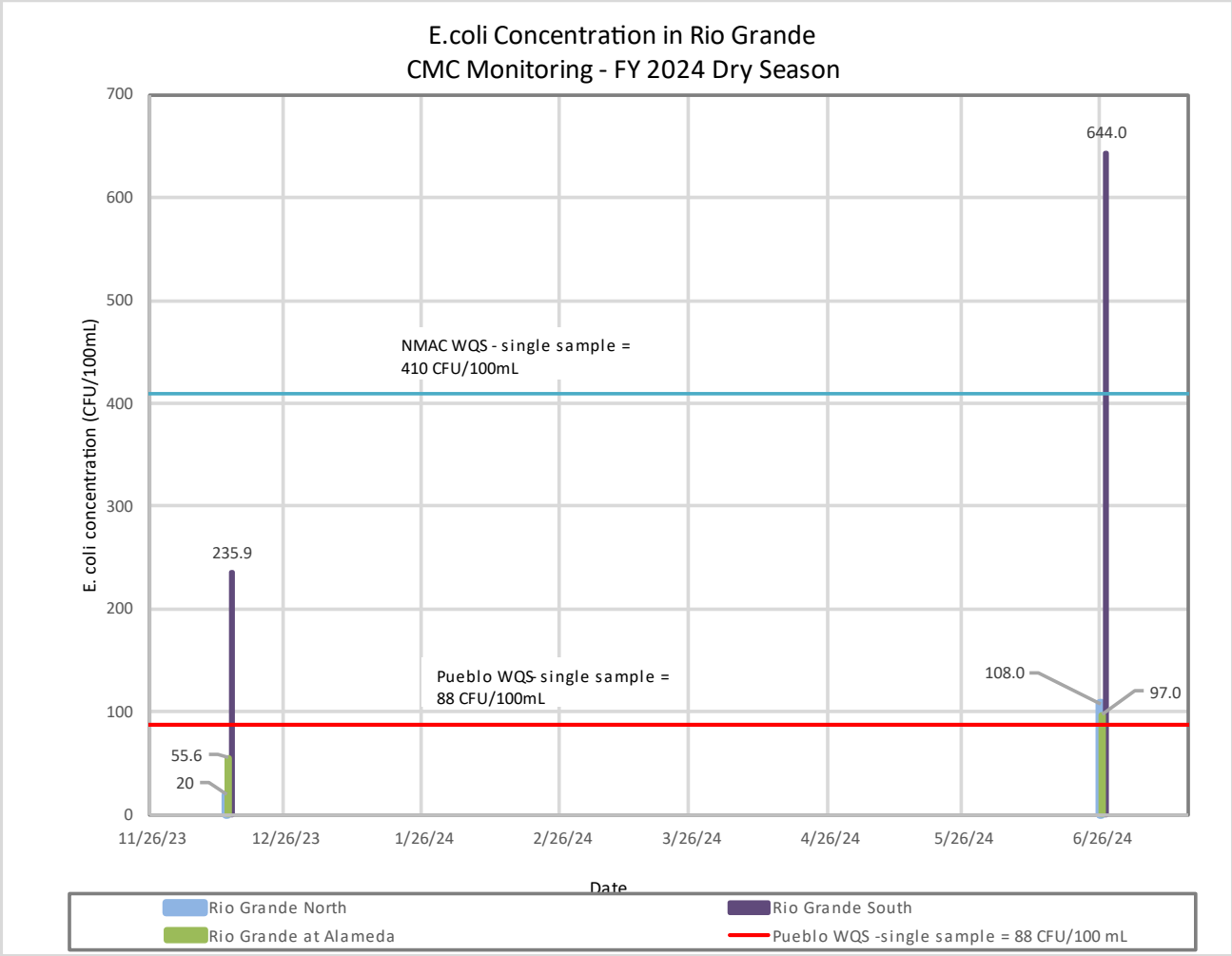


Figure 2: E. coli Monitoring Results in Rio Grande
CMC Monitoring – FY 2024 Dry Season

PCBs:

There are multiple surface WQS values listed for PCBs in both the Pueblo of Isleta and the State of New Mexico standards for the various designated uses. The PCB results for samples collected from the Rio Grande during the FY 2024 dry season stormwater events were below the minimum quantification level (MQL) established in EPA standards for the MS4 NPDES Permit (Appendix F, 0.2 ug/L for PCBs). PCBs were not detected for the both the December 2023 and June 2024 Rio Grande North samples. However, both samples from the Rio Grande South location were above the Pueblo of Isleta human health criteria (based on fish consumption only) WQS for surface waters. The human health-organism only criterion is based upon human consumption of fish and other aquatic life that bioaccumulate contaminants over time. The PCB results from 2016 through 2024 are shown in Figure 3, relative to several of the WQSs for PCBs.

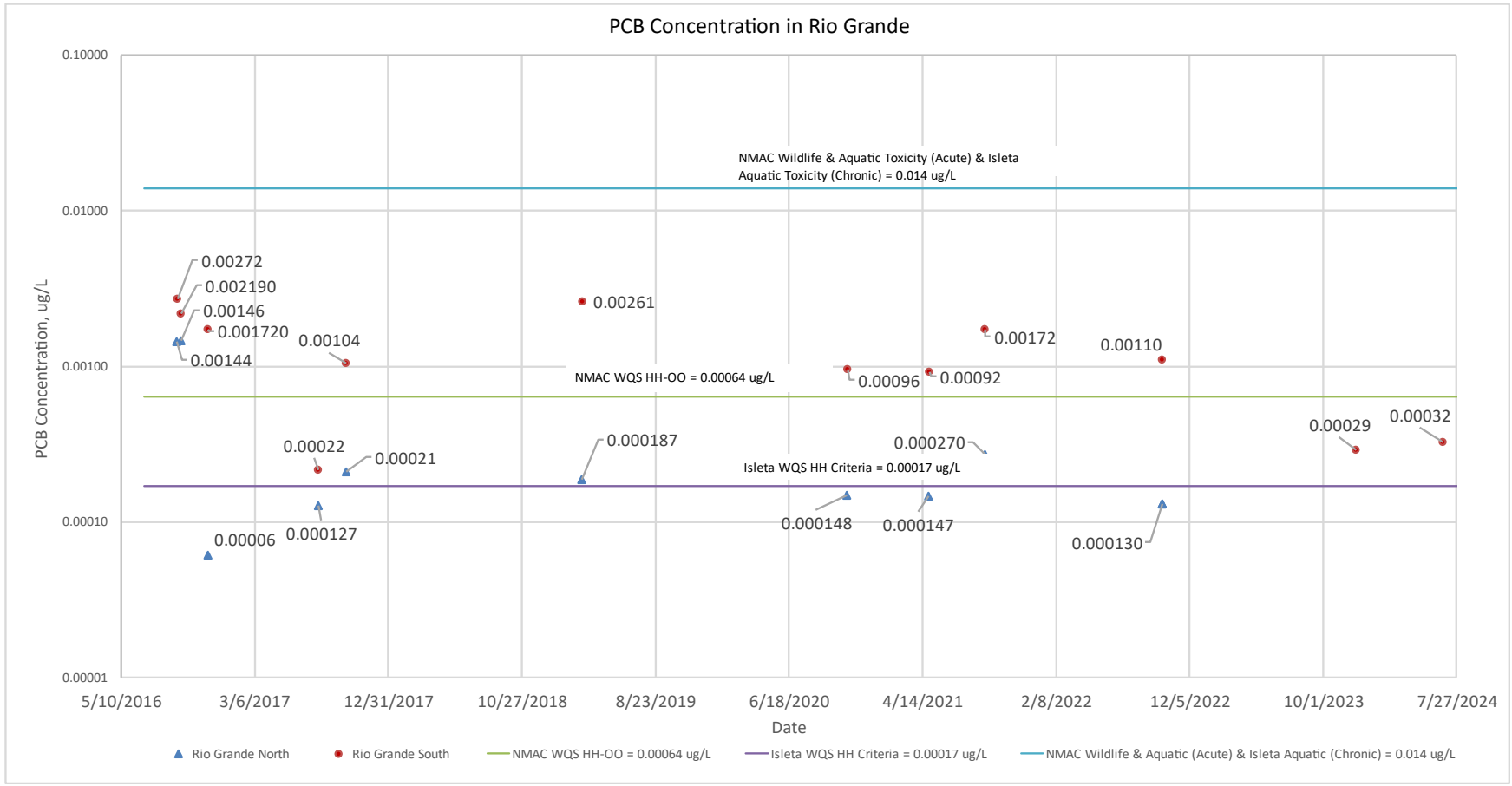


Figure 3: PCB Monitoring Results in Rio Grande
CMC Monitoring – 2016 - 2024

Gross Alpha, Adjusted:

The December 2023 and June 2024 samples did not exceed the New Mexico and Pueblo of Isleta WQSs for gross alpha, adjusted. The WQS for gross alpha, adjusted is the same value for both the NMAC 20.6.4 Water Quality Criterion and Pueblo of Isleta. The WQS of 15 pCi/L ("pCi/L" means picocuries per liter) is a general standard for the Pueblo of Isleta; for New Mexico it is based on Domestic Water Supply and Livestock Watering designated uses.

The last exceedance for gross alpha, adjusted for CMC sampling was reported for the October 6, 2022, Rio Grande South sample. The CMC will continue to closely evaluate this parameter in future samples. If additional exceedances occur, the CMC will discuss the results further and may consult NMED for further guidance.

Dissolved Copper:

The June 27, 2024 sample result of 10 ug/L for the Rio Grande South at Isleta Dam exceeded the New Mexico, Pueblo of Sandia, and Pueblo of Isleta WQS for dissolved copper. The acute WQS for dissolved copper is 8 ug/L for the NMAC 20.6.4 Water Quality Criterion, Pueblo of Sandia, and Pueblo of Isleta; the Aquatic life Acute value is based on hardness of 90 mg/L.

Most dissolved copper CMC results for the Rio Grande South at Isleta Dam have been <1 ug/L. The previous highest result was 1.5 ug/L for CMC sampling reported for September 2, 2021 for the Rio Grande South sample. The CMC will continue to closely evaluate this parameter in future samples. If additional exceedances occur, the CMC will discuss the results further and may consult NMED for further guidance.

Dissolved Oxygen (DO) and Temperature:

Two (2) of the water quality parameters are specifically worth mentioning in this memo because they are listed in the WSB MS4 Permit, Part I.C.1 – Special Conditions: dissolved oxygen (DO) and temperature. The temperature parameter did not have any surface water quality exceedances during the FY 2024 dry season sampling.

DO is a water quality concern in the Rio Grande if it is below 5 mg/L. The samples taken on June 26, 2024 at Rio Grande North and Rio Grande at Alameda had DO values below 5 mg/L. These values were not reported as exceedances because the reported field values were taken from a fifth composite sample when the previous four (4) other samples were above 5 mg/L. From the CMC Sampling data sheet of both the Rio Grande North and the Rio Grande at Alameda, the temperature of the sample increases within the hour of composite testing due to ambient air temperature, and the DO decreases due to the inverse relationship between the two parameters. The DO reported lower than 5 mg/L was not due to the stormwater runoff that occurred but due to the sampling protocol, which impacted the reported DO.

This provides the MS4s with specific monitoring data showing that stormwater did not cause or contribute to exceedances of applicable DO WQSs in the Rio Grande from any of the CMC samples from 2016 to 2024. Refer to Figure 4 for CMC DO results and comparison to applicable WQSs.

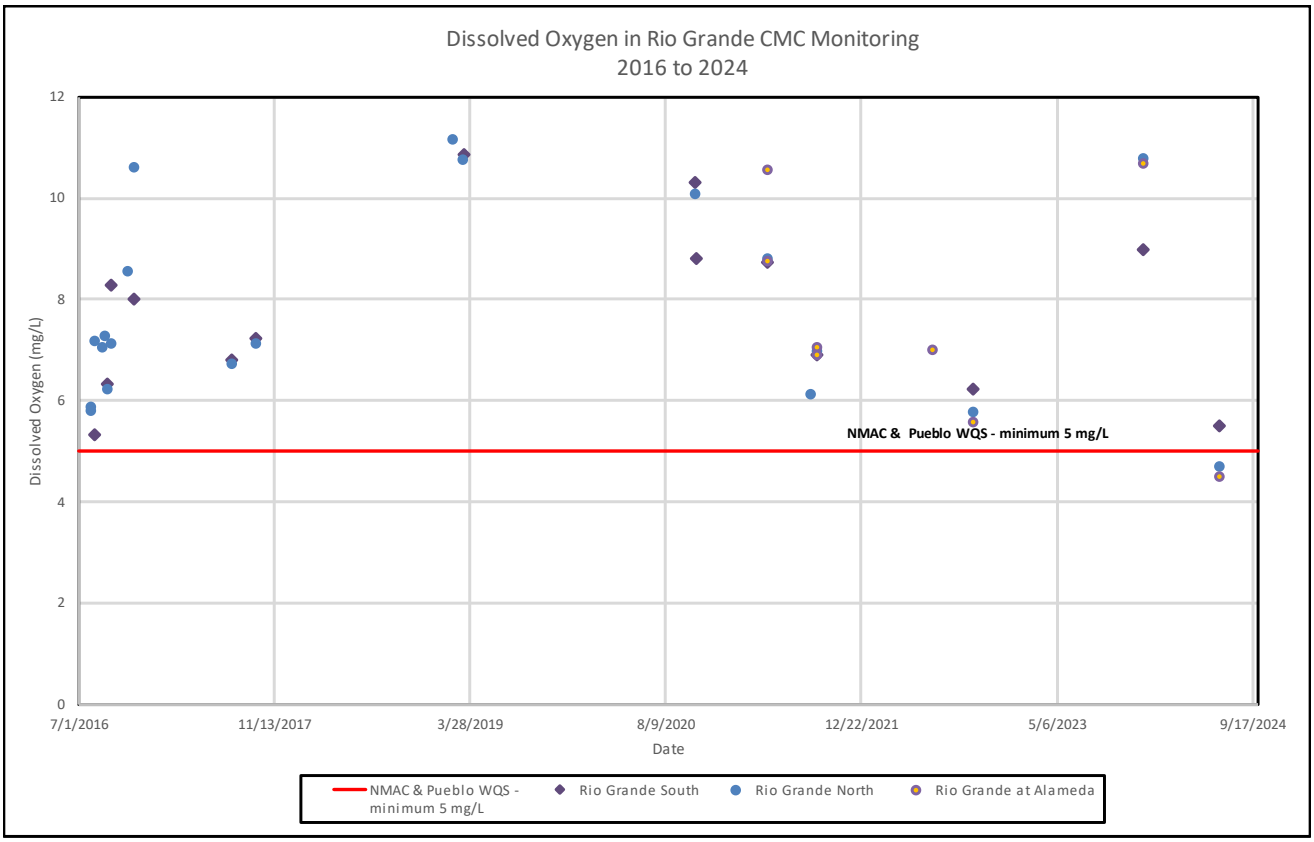


Figure 4: Dissolved Oxygen (DO) Monitoring Results in the Rio Grande CMC Monitoring – 2016 – 2024

Temperature is listed in the WSB MS4 Permit as a special condition (currently only applicable to the City of Albuquerque and AMAFCA). Past data submitted to EPA and NMED by the MS4 permittees have proven that stormwater discharges into the Rio Grande are not raising the Rio Grande temperature above the WQSs. The data collected during this FY 2024 dry season monitoring also supports this conclusion. All the temperature field readings taken in the Rio Grande during the CMC FY 2024 dry season were below 32.2°C (90°F), which is the WQS for the State of New Mexico and for the Isleta and Sandia Pueblos. Refer to Figure 5 for temperature results and comparison to applicable WQSs for all CMC samples taken upstream and downstream of the MRG MS4 area from 2016 to 2024.

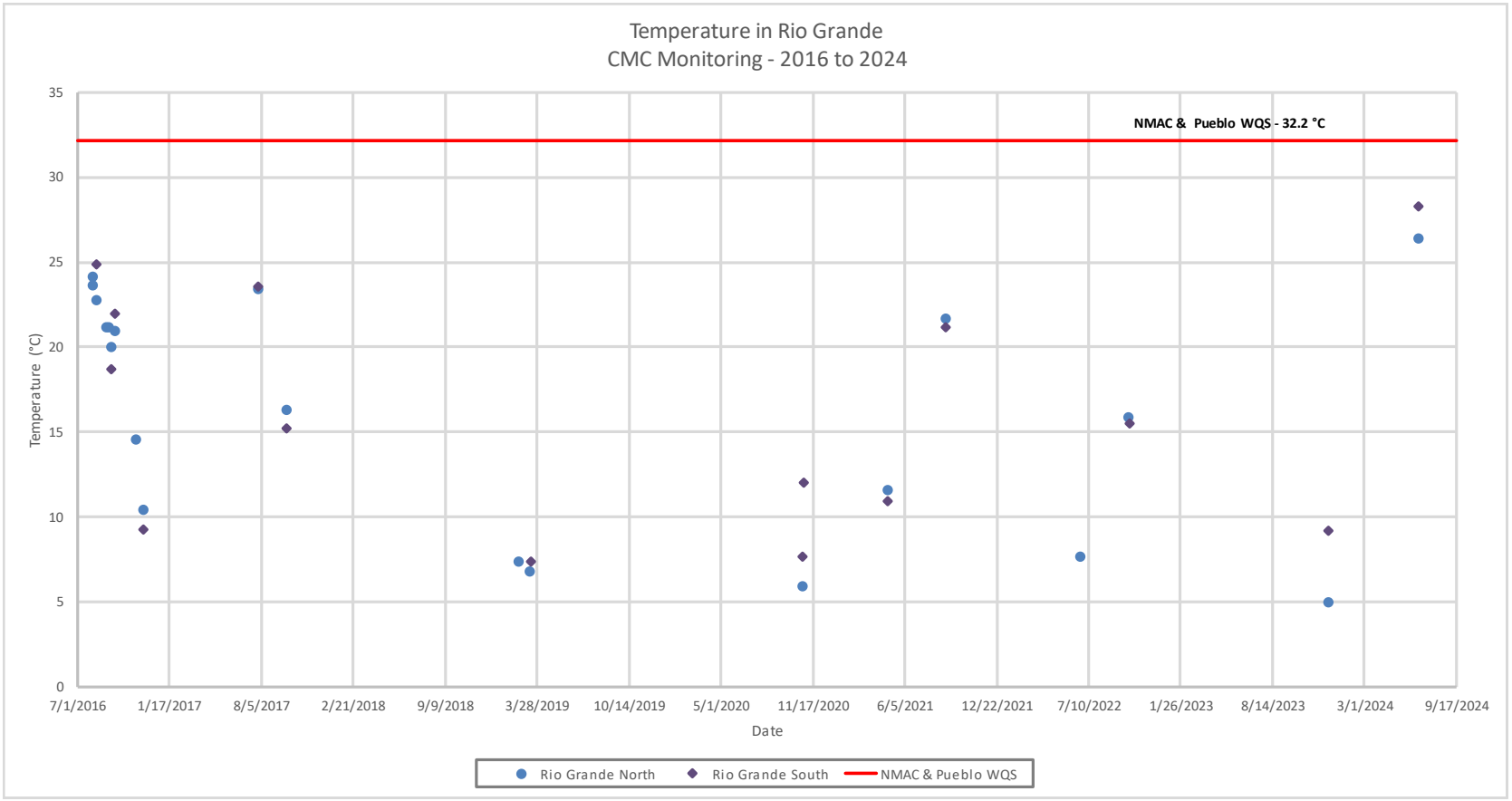


Figure 5: Temperature Monitoring Results in the Rio Grande
CMC Monitoring – 2016 - 2024

CMC FY 2024 DRY SEASON E. COLI LOADING CALCULATIONS AND WASTE LOAD ALLOCATION (WLA)

Related to assessing the stormwater results, the E. coli loading was calculated and compared to the aggregate Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) for the CMC group. A TMDL is the maximum amount of a pollutant (E. coli in this case) that a water body (Rio Grande) can assimilate on a daily basis without violating applicable surface WQSs. The total TMDL for a stream segment consists of the multiple WLAs for point sources, non-point sources, and natural sources, plus a margin of safety. The CMC MS4 allotted WLA was determined in the EPA Approved, *Total Maximum Daily Load for the Middle Rio Grande Watershed*, June 30, 2010, and subsequent communications with NMED. The WLA varies by flow condition in the Rio Grande and by stream segment.

E. coli loading calculations and comparison to the WLA follows the WSB MS4 Permit requirements in *Discharges to Water Quality Impaired Water Bodies with an Approved TMDL*, *Part I.C.2.b.(i).(c).B*, *Appendix B-Total Maximum Daily Loads* (TMDLs) Tables of the WSB MS4 Permit, and the NMED guidance provided to the CMC. Attached to this memo is the WLA Calculation spreadsheet, which steps through the E. coli loading calculations and assumptions comparing the calculated E. coli loading to the CMC aggregate WLA defined by NMED.

There are two (2) stream segments defined in the WSB MS4 Permit (Appendix B): Isleta Pueblo Boundary to Alameda Street Bridge (Stream Segment 2105_50) and Non-Pueblo Alameda Bridge to Angostura Diversion (Stream Segment 2105.1_00). These stream segments differ from NMED's current stream segments defined in the *2022-2024 State of New Mexico Clean Water Act Section 303(d)/Section 305(b) Integrated Report* (NMED, April 2022) and *Draft 2024-2026 State of New Mexico Clean Water Act Section 303(d)/Section 305(b) Integrated Report* (NMED, December 2023). NMED currently has four (4) stream segments instead of the two (2) WSB MS4 stream segments. These various stream segment designations are shown in Figure 6, page 17.

The *NMED 303(d)/305(b) 2022-2024* and *Draft 2024-2026 Integrated Report* tables show the most recent assessment results, and currently all segments of the Rio Grande (Isleta to Angostura Diversion) are impaired for E. coli and have a TMDL for E. coli.

The E. coli daily loading associated with the CMC group and comparison to the NMED WLA was completed for the two (2) qualifying dry season storm events – December 13-14, 2023 and June 26-27, 2024. For these events, the CMC obtained an E. coli sample in the Rio Grande at Alameda and used this to calculate the E. coli loading for the two (2) river segments. Refer to Table 5 on page 18 for a summary of the WLA comparison results. A spreadsheet is attached to this memo that provides the detailed WLA calculations.

Rio Grande Segment
Hwy 550 Bridge to Angostura Diversion
NM-2105.1_02

Impairments CWA 303(d) List*	TDML
E. coli	E. coli

MS4 Permit Stream Segment
Alameda Bridge to
Angostura Diversion
2105.1_00

Rio Grande Segment
Alameda Bridge to Hwy 550 Bridge
NM-2105.1_00

Impairments CWA 303(d) List*	TDML
Gross alpha, adjusted	E. coli
PCBs - Fish Consumption Advisory	
Mercury - Fish consumption Advisory	
PCBs	
E. coli	

Rio Grande Segment
Tijeras Arroyo to Alameda Bridge
NM-2105_51

Impairments CWA 303(d) List*	TDML
Dissolved Oxygen	E. coli
PCBs - Fish Consumption Advisory	
Mercury - Fish Consumption Advisory	
Temperature	
E. coli	

MS4 Permit
Stream Segment
Isleta Pueblo
Boundary
to Alameda St.
Bridge
2105_50

Rio Grande Segment
Isleta Pueblo Boundary to Tijeras Arroyo
NM-2105_50

Impairments CWA 303(d) List*	TDML
Dissolved Oxygen	E. coli
PCBs - Fish Consumption Advisory	
Mercury - Fish Consumption Advisory	
E. coli	

MS4 Permit Stream Segments
NMED Stream Segments
North Diversion Channel
Albuquerque Urbanized Area
Rio Grande
Interstate Highway
U.S. Highway
State Highway

AMAFCA

Bohannan Huston
www.bhinc.com
800.877.5332

N

0 12,500 25,000 Feet

1 in = 12,500 ft

CMC Monitoring

Figure 6
Rio Grande Impairments & TMDL Information

* 2024-2026 State of NM Clean Water Act, Section 303(d)/Section 305(b) Integrated Reports

P:\20240355\GIS\Projects\20240355_CMCMonitoring_Figures\20240355_CMCMonitoring_Figures.aprx
Author: mcrooks

September 2024

Table 5: Summary of CMC E. Coli Loading Compared to WLA

Date / Stream Segment	Daily Mean Flow (cfs)	Flow Conditions (cfs) *range defined by NMED*	CMC Daily E. coli Loading (CFU/day)	NMED WLA for CMC for Stream Segment and Flow Conditions	Loading Compared to WLA Potential Exceedance or Acceptable
December 13-14, 2023 – Rio Grande North E. coli Concentration 12/13/2023 = 19.7 MPN (CFU/100 mL) Rio Grande at Alameda E. coli Concentration 12/13/2023 = 55.6 MPN (CFU/100 mL) Rio Grande South E. coli Concentration 12/14/2023 = 235.9 MPN (CFU/100 mL)					
Alameda to Angostura	2,250	Moist	1.17E+11	9.09E+10	WLA Potential Exceedance
Isleta to Alameda	2,210	Moist	5.70E+11	6.29E+10	WLA Potential Exceedance
June 26-27, 2024 – Rio Grande North E. coli Concentration 6/26/2024 = 108 MPN (CFU/100 mL) Rio Grande at Alameda E. coli Concentration 6/26/2024 = 97 MPN (CFU/100 mL) Rio Grande South E. coli Concentration 6/27/2024 = 644 MPN (CFU/100 mL)					
Alameda to Angostura	486	Dry	1.17E+11	3.24E+10	WLA Acceptable
Isleta to Alameda	476	Dry	5.70E+11	1.57E+10	WLA Potential Exceedance

As Table 5 illustrates, the calculated E. coli loading for the December 13-14, 2023 storm event for the northern segment (Alameda to Angostura) and the southern segment (Isleta to Alameda) of the Rio Grande were above the WLA for the CMC MS4s. This analysis used the mid-point E. coli sample result obtained in the Rio Grande at Alameda. For June 26-27, 2024, the calculated E. coli loading for the storm event for the northern segment (Alameda to Angostura) was an acceptable WLA for the CMC MS4s. The southern segment (Isleta to Alameda) of the Rio Grande was above the WLA for the CMC MS4s. This analysis used the mid-point E. coli sample result obtained in the Rio Grande at Alameda.

The WSB MS4 Permit implies that the WLA is a measurable goal for the MS4s related to E. coli. Based on extensive review of the EPA Approved, *Total Maximum Daily Load (TMDL) for the Middle Rio Grande Watershed*, June 30, 2010, this seems to be an unattainable goal for MS4s.

Page 40 of the 2010 TMDL Report states, “It is important to remember that the TMDL is a planning tool to be used to achieve water quality standards…Meeting the calculated TMDL may be a difficult objective.” The TMDL/WLA was calculated by NMED to meet the Pueblo (Sandia and Isleta) geometric mean maximum of 47 CFU/100 ml, which was done to be “protective of downstream waters” and “to provide an implicit margin of safety (MOS)”. A single grab sample E. coli result meeting this very low geometric means WQSs will be very difficult for the MS4s to obtain.

The CMC members discussed the difficulty of using the WLA as a measurable goal with NMED on February 1, 2017. NMED explained that exceeding the WLA does not trigger enforcement. However, NMED strongly encouraged the MS4s to document what they are doing once they realize the WLA is potentially exceeded. The meeting on February 1, 2017, and the CMC discussion with NMED on February 16, 2017, demonstrate CMC members are working toward understanding the WLA. In addition, the CMC members began implementing a refinement to the sampling plan discussed with NMED by obtaining an E. coli sample in the Rio Grande at Alameda effective the FY 2018 wet season, as feasible. This demonstrates that the CMC is continuing to investigate the potential exceedances and make improvements to monitor E. coli in the Rio Grande.

DATA ENTRY FOR DISCHARGE MONITORING REPORTS

The WSB MS4 Permit entered Administrative Continuance in December 2019, when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit's expiration date. Until a new MS4 Permit is issued, there are no compliance monitoring requirements for the CMC in the Rio Grande. As identified in the WSB MS4 CMC Monitoring Plan, the WSB MS4 Permit required a minimum of seven (7) storm events be sampled at both the Rio Grande North and Rio Grande South locations. All MS4 Permit required samples have been obtained by the CMC and verified stormwater quality data from these required events have been submitted to the EPA using electronic Discharge Monitoring Report (DMR) forms. Data from the DMRs are uploaded to a comprehensive nationwide database that contains discharge data for facilities and other point sources that discharge directly to receiving streams. For this task, BHI has not completed any data entry related to the EPA DMRs for the FY 2024 dry season.

CONCLUSIONS AND PLANNING

During the FY 2024 dry season (Nov. 1, 2023 to June 30, 2024), two (2) qualifying stormwater samples were obtained by the CMC. Lab results were received, and this data has been entered into the CMC Excel database. The lab data entered is marked in the spreadsheet as "V" (verified), and data V&V has been completed (refer to Attachment 2).

To summarize, monitoring results and E. coli loading calculations for the FY 2024 dry season show that:

- The WSB MS4 Permit entered Administrative Continuance in December 2019, when EPA Region 6 did not issue a new MS4 Permit before the current MS4 Permit's expiration date. Until a new MS4 Permit is issued, there are no compliance monitoring requirements for the CMC in the Rio Grande. All MS4 Permit required samples have been obtained by the CMC, as well several samples collected during Administrative Continuance, including the two (2) samples obtained in the FY 2024 dry season, as reported in this memo.
- For the FY 2024 dry season, 15 parameters were not detected in the FY 2024 dry season samples at either the Rio Grande North or South locations for both the December 2023 and June 2024 stormwater samples.
- A few key parameters met the applicable WQSs, as they have for all the CMC samples to date:
    - All temperature results were less than 32.2°C (maximum WQS).
    - All gross alpha, adjusted results were less than 15 pCi/L (maximum WQS).

- The PCB results were below the New Mexico Surface WQSs and Pueblo of Isleta Surface WQSs for designated uses, including drinking water, wildlife habitat, acute aquatic life, and chronic aquatic life. However, the Rio Grande South CMC samples from December 14, 2023 and June 27, 2024, were above the Pueblo of Isleta human health criteria (based on fish consumption only) WQS for surface waters.
- The calculated E. coli loading for the December 13-14, 2023 storm event for the northern segment (Alameda to Angostura) and the southern segment (Isleta to Alameda) of the Rio Grande was above the WLA for the CMC MS4s. This analysis used the mid-point E. coli sample result obtained in the Rio Grande at Alameda.
    - Sources for the E. coli loading measured in the river are not solely attributable to the CMC MS4 members; the E. coli loading calculations serve to provide a reasonable estimate of the CMC contribution to the measured E. coli loading.
- The calculated E. coli loading for the June 26-27, 2024 storm event for the north segment (Alameda to Angostura) was acceptable for the WLA for the CMC MS4s. The southern segment (Isleta to Alameda) of the Rio Grande was above the WLA for the CMC MS4s. This analysis used the mid-point E. coli sample result obtained in the Rio Grande at Alameda.
    - Sources for the E. coli loading measured in the river are not solely attributable to the CMC MS4 members; the E. coli loading calculations serve to provide a reasonable estimate of the CMC contribution to the measured E. coli loading.

These two (2) samples were the only CMC samples obtained in FY 2024. A wet season sample (July 1, 2023 – Oct. 31, 2023) was not obtained by the CMC. Therefore, this is the only reporting memo for CMC members for FY 2024.

SG/ab

Attachments:

Attachment 1 – DBS&A Field Data & Eurofins Environment Testing Environmental Analysis Laboratory Reports with BHI Notes for FY 2024 Dry Season

Attachment 2 – FY 2024 Dry Season Completed Data Verification and Validation (V&V) Forms

Spreadsheets Included Separately:

E. coli Loading and Comparison to Waste Load Allocation (WLA) Excel Spreadsheet

Excel CMC Spreadsheet with FY 2024 Dry Season Stormwater Quality Monitoring Results

ATTACHMENT 1

DBS&A FIELD DATA & EUROFINS ENVIRONMENT TESTING LABORATORY REPORTS WITH BHI NOTES FOR FY 2024 DRY SEASON

CMC Water Quality Results Database
FY 2017 -FY 2024
Date: July 4, 2024
Summary of Lab Results for CMC samples

Parameter	Permit Required Units	Provisional or Verified	2024 CMC SAMPLE NORTH Collection Date 12/13/2023 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2024 CMC SAMPLE NORTH Collection Date 6/26/2024 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2023 CMC SAMPLE SOUTH Collection Date 12/14/2023 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2024 CMC SAMPLE SOUTH Collection Date 6/27/2024 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2024 CMC SAMPLE - EXTRA ALAMEDA Collection Date 12/13/23 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion	Provisional or Verified	2024 CMC SAMPLE - EXTRA ALAMEDA Collection Date 6/26/24 Dry Season Sample	Qualifier	Check compared to Water Quality Criterion
Total Suspended Solids (TSS)	mg/L	V	6		--	V	58		--	V	22		--	V	160		--								
Total Dissolved Solids (TDS)	mg/L	V	204		OK	V	250		OK	V	226		OK	V	280		OK								
Chemical Oxygen Demand (COD)	mg/L	V	110		--	V	ND		--	V	ND		--	V	ND		--								
Biochemical Oxygen Demand (BOD_5)	mg/L	V	<2.0	H	--	V	2	*-b	--	V	<2.0		--	V	ND	*-b	--								
Dissolved Oxygen (DO)	mg/L	V	10.8		OK	V	4.7	Refer to comment in previous column	<WQ Standard	V	9		OK	V	5.5		OK	V	10.7		OK	V	4.5	Refer to comment in previous column	<WQ Standard
Oil and Grease (N-Hexane Extractable Material)	mg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
E. coli	MPN (CFU/100 mL)	V	19.7		OK	V	108.0		>WQ Standard	V	235.9		>WQ Standard	V	644.0		>WQ Standard	V	55.6		OK	V	97.0		>WQ Standard
pH	S.U.	V	8.15		OK	V	8.41		OK	V	8.24		OK	V	8.3		OK	V	7.73		OK	V	8.4		OK
Total Kjedahl Nitrogen (TKN)	mg/L	V	ND		--	V	0.6		--	V	ND		--	V	0.99		--								
Nitrate plus Nitrite	mg/L	V	ND	DF 5	OK	V	0.14		OK	V	0.32	J	OK	V	0.62		OK								
Dissolved Phosphorous	mg/L	V	ND		--	V	0.055		--	V	0.065		--	V	0.37		--								
Ammonia (mg/L as N)	mg/L	V	1.1	JD	OK	V		Not reported in lab report	N/A	V	0.84	JD	OK	V		Not reported in lab report	OK								
Total Nitrogen	mg/L	V	ND	D	OK	V	0.74		OK	V	ND	D	OK	V	1.61		OK								
Total Phosphorous	mg/L	V	ND		--	V	0.13		--	V	0.14		--	V	0.38		--								
PCBS - 0.000064 (Method 1668A - sum of all congeners)	µg/L	V	ND		OK	V	ND		OK	V	0.0002908	J q	>WQ Standard	V	0.000323	J q	>WQ Standard								
Gross Alpha, Adjusted	pCi/L	V	2.25 ± 1.72		OK	V	5.25		OK	V	0.945 ± 1.43		OK	V	3.77	U	OK								
Tetrahydrofuran	µg/L	V	ND		--	V	ND	H	--	V	ND		--	V	ND	H	--								
Benzo[a]pyrene	µg/L	V	ND		OK	V		Not reported in lab report	N/A	V	ND		OK	V		Not reported in lab report	OK								
Benzo[b]fluoranthene (other name: 3,4-Benzofluoranthene)	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Benzo(k)fluoranthene	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Chrysene	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Indeno(1,2,3-cd)Pyrene	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Dieldrin	µg/L	V	ND		OK	V	ND	*+, H	OK	V	ND		OK	V	ND	*+, H	OK								
Pentachlorophenol	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Benzidine	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Benzo(a)anthracene	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Dibenzofuran	µg/L	V	ND		--	V	ND		--	V	ND		--	V	ND		--								
Dibenzo(a,h)anthracene	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Chromium VI (Hexavalent)	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Dissolved Copper	µg/L	V	0.55		OK	V	0.95		OK	V	0.75		OK	V	10		>WQ Standard								
Dissolved Lead	µg/L	V	ND		OK	V	ND		OK	V	ND		OK	V	ND		OK								
Bis (2-ethylhexyl) Phthalate (other names: Di(2-ethylhexly)phthalate, DEHP) - 2.2	µg/L	V	ND		OK	V	ND	*+	OK	V	ND		OK	V	ND	*+	OK								
Conductivity	umhos/cm	V	305		--	V	254.1		--	V	338		--	V	337		--	V	310		--	V	272.1		--
Temperature	°C	V	5		OK	V	26.4		OK	V	9.2		OK	V	28.3		OK	V	7.1		OK	V	28.9		OK
Hardness (as $CaCO_3$)	mg/L	V	120		--	V	110		--	V	130		--	V	140		--								
Mercury	µg/l																								
PFA (6)	ppt (ng/L)					P	3.1	J	OK					P	4.1	JI	OK								
PFA (6) (filtered)	ppt (ng/L)					P			OK																

39

Data Verification/Validation and Qualifier Notes:
(R) The sample results are unusable because certain criteria were not met. The analyte may or may not be present in the sample.
(H) Sample holding time exceeded.
(J) The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
(D) Sample was diluted by Lab due to matrix
(U) Analyte was analyzed for, but not detected above the specified detection limit.

Notes:
1. Wet Season monitoring period - July 1 to October 31 and Dry Season monitoring period - November 1 to June 30 according to the Watershed Based MS4 Permit NMR04A000.
2. Water Quality Criterion from 20.6.4 NMAC; Rio Grande Basin - section 20.6.4.105; For
a mean monthly flow of 100 cfs, monthly average concentration for TDS 1,500 mg/l or
3. Aquatic life criteria for metals are expressed as a function of total hardness (mg/L as
4. According to NMAC 20.6.4, E. coli bacteria for Primary Contact - monthly geometric
5. Water quality criterion for metals is based on dissolved metals, NMAC 20.6.4.900.I
and individual sample results compared to acute toxicity values.
6. Eurofins lab method: SM 9223B Fecal Indicator. Note - lab method for units of
MPN/100 ml, lab report uses units CFU/100 ml, for this analysis assuming two units are
7. PFA 6 is for the sum of 6 PFAS in drinking water; these
compounds are PFOA, PFOS, PFNA, PFHpA, PFHxS and PFDA

ND - analyte not detected above the laboratory method detection limit
NA - not analyzed
Hatching also indicates that parameter was not analyzed

National recommended WQ criteria Human Health
https://www.epa.gov/wqc/national-recommended-water-quality-criteria-human-health-criteria-table

Samplers C. Johannesen, J. Alles

CMC Sampling Data Sheet

Site Identification: RG-North

Notes: YSI Pro 1020 S# 21C102804
Oakton CTSI

Full Suite Sample Date and Time:	12-13-23 1200
Full Sample Identification:	RGNorth-20231213
QC Samples: Duplicate / (None)	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point : Animas River Diversion works

Full Suite Sample Volume: 8 gal Collection Time Start: 1115 End: 1200

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1	1115	7.3	6.56	337	10.5	102
2	1130	5.0	7.79	302	10.8	99
3	1145	5.7	8.04	304	10.1	95
4	1200	5.1	8.11	313	10.5	98
Composite	1203	5.0	8.15	305	10.8	99

☐Turbid Water ☒Color clear to yellow ☐Solids ☐Oil/Sheen ☐Foam ☐Odor NO

Analytical - see 2021 COC table

☒Site Photo ☐Sample Photo

Samplers C. Johanneson, J. Alles

CMC Sampling Data Sheet

Site Identification: RG-South

Notes: YSI Pro 1020 S# 21C102804

OAKTON CTSI

Full Suite Sample Date and Time:	12/14/23 1445
Full Sample Identification:	RG South- 20231214
QC Samples:	Duplicate / (None) QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point : Isleta dam

Full Suite Sample Volume: 8 gal Collection Time Start: 1408 End: 1445

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1	1400	11.7	7.81	332	7.2	78
2	1415	9.7	8.15	329	8.2	85
3	1430	9.8	8.23	330	9.2	96
4	1445	9.3	8.31	332	8.2	85
Composite	1450	9.2	8.24	338	9.0	92

☒Turbid Water ☐Color Brown ☒Solids ☐Oil/Sheen ☐Foam ☐Odor None

Analytical - see 2021 COC table

☒Site Photo ☒Sample Photo

Samplers C. Johannesen, J. Alles

CMC Sampling Data Sheet

Site Identification: Rio Grande @ Alameda

Notes: YSI Pro 1020 S# 21C102804
Oakton CTSI

Full Suite Sample Date and Time:	12/13/14 1325
Full Sample Identification:	RG Alameda - 20231213
QC Samples: Duplicate / None	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point : Pedestrian Bridge

Full Suite Sample Volume: 1L Collection Time Start: 1325 End:

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1						
2						
3						
4						
Composite	1325	7.1	7.73	310	10.7	97

☐Turbid Water ☒Color Clear ☒Solids ☐Oil/Sheen ☐Foam ☐Odor_____

Analytical - see 2021 COC table

☒Site Photo ☒Sample Photo

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: ~~Daniel B Stephens~~ AMAFCA
Mailing Address: ~~6020 Academy~~
Phone #:
email or Fax#: pchavez@amafca.org
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: CMC
Project #: Dry Season FY24
Project Manager: Patrick Chavez
Sampler: DBSA - C. Johannsen
On Ice: ☒ Yes ☐ No
# of Coolers: 1 yom:
Cooler Temp (Including CF): 8.7+0.1=8.8 (°C)

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Ecoli - enumeration					
12-13-23	1200	AQ	RGNorth-20231213	1													X					
12-13-23	1325	AQ	RGAlameda-20231213	1													X					

Date	Time	Relinquished by	Received by	Via	Date	Time
12-13-23	1340	[signature]	[signature]	CDU	12/13/23	13:54

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client:

Mailing Address:

Phone #:

email or Fax#: pchavez@amafca.org

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: CMC FY24 Dry

Project #:

Project Manager: Patrick Chavez

Sampler: DBS4 - C. Johanneson

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	ecoli - enumerated	See attached list				
~~12-13-24~~ 12-13-23	1200	AQ	R6 North-20231213															X				
12-14-23	1445		R6 South-20231214														X	X				
		TMC 12/14/23																				

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
[illegible]	[illegible]	[illegible]	[illegible]	CDO	12/14/23	16:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
3.9 - 0 = 3.8°C
7.7 - 0 = 7.7°C
marty

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Samplers IT / EB

CMC Sampling Data Sheet

Site Identification: RG North

Notes: on site 1325

Full Suite Sample Date and Time:	1505 6/26/24
Full Sample Identification:	RG North ~~20240626~~ 20240626
QC Samples: Duplicate / None	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point : MRGCD Dam ~~Stack~~ Structure

Full Suite Sample Volume: Collection Time Start: End:

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1	1400	24.5	8.06	238.5	5.6	82
2	1415	24.1	8.30	253.9	5.4	76
3	1430	24.3	8.29	254.7	5.7	81
4	1445	24.5	8.26	253.6	5.1	74
Composite	1505	24.4	8.41	254.1	4.7	71

☑ Turbid Water ☑ Color yellowish Brown ☐ Solids ☐ Oil/Sheen ☐ Foam ☑ Odor Biological odor

Analytical - see 2021 COC table

☒ Site Photo ☒ Sample Photo

Samplers IT/EB

CMC Sampling Data Sheet

Site Identification: RG at Alameda

Notes: on site @ 1618

Full Suite Sample Date and Time:	6/26/24 1628
Full Sample Identification:	RG @ [redacted] Alameda 20240626
QC Samples: Duplicate / None	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point :

Full Suite Sample Volume: Collection Time Start: End:

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1						
2						
3						
4						
Composite	1628	28.9	8.40	272.1	4.5	70

☑ Turbid Water ☑ Color Slightly cloudy ☐ Solids ☐ Oil/Sheen ☐ Foam ☑ Odor Biological odor

Analytical - see 2021 COC table

☑ Site Photo ☑ Sample Photo

Samplers J Torres

CMC Sampling Data Sheet

Site Identification: RG South

Notes: Weather mostly Sunny 83°F

Full Suite Sample Date and Time:	6/27/24 1310
Full Sample Identification:	RG South 20240627
QC Samples: Duplicate / None	QC Sample ID:
QC samples require a DIFFERENT sample time than the environmental sample. QC Sample time:	

Full Suite Collection Point :

Full Suite Sample Volume: Collection Time Start: 12:00 End: 12:45

Field Parameters for each 2-gallon grab

Grab	Time	Temp (°C)	pH	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)
1	1200	26.6	7.67	329.3	5.4	79
2	1215	26.9	8.26	337.4	5.4	80
3	1230	27.0	8.26	336.8	5.2	77
4	1245	27.4	8.28	334.9	4.7	70
Composite	1310	28.3	8.30	337.0	5.5	83

☐Turbid Water ☑Color yellowish Brown ☑Solids Some Solids ☐Oil/Sheen ☐Foam ☑Odor Biological odor

Analytical - see 2021 COC table

☑Site Photo ☑Sample Photo

YSI SONDE CALIBRATION WORKSHEET

Last Revision 01/03/2017

Sonde ID: 21B10053 Date/Time: 6/20/24 / 1334 Technician: I Torres

Reason for Calibration: RG North Sampling & Bastion

Battery Voltage: _____ (6920 & 600 XLM only)

Specific Conductance:

Standard Used (mS) _____

Calibration Values		
Initial	Post Cal.	Cell Constant:*

(Range: 5 +/- 0.5)

pH

		Calibration Values			
		Initial	Post Cal.	mV	
7 Buffer:	(first)	7.02	7.01	4.7	(Range: 0 mV +/- 50)
4 Buffer:	(second)	4.32	4.0	164.2	(Range: +177 from pH 7)
10 Buffer:	(third)	9.92	10.01	-167.0	(Range: -177 from pH 7)

Note: Span between pH 7 and pH 4, and pH 7 and pH 10 should be aproximately 165 to 180 mV.

DO % Sat. Membrane Changed? Y/N _____ If yes, run probe at least 15 mins before calibration. Optimally, wait 6 to 8 hrs before calibration / use.

DO Charge _____ (Range: 50 +/- 25)

mm Hg 631.4

Calibration Values %		
Initial	Post Cal.	DO Gain*
77.3	100	

(Range: 1 (0.7 to 1.5))

Turbidity Wiper Changed? Y/N _____ Wiper parks ~180 degrees from optic port? Y/N _____

Standards Values (NTUs)

Zero (Always First)

_____

_____

Calibration Values	
Initial	Post Cal.

Note: Use longer probe guard with black turb probe; shorter guard with grey probe.

Post Calibration DO Sensor Output Test

Turn off handset (650MDS). Wait 1 minute, turn handset on and enter "Run". DO % Sat. **must** start reading with a high value and descend to the calibration value in 1 to 2 minutes. **If it does not, reject.**

Note: Disregard the first two readings as they may be affected by the warm-up process.

Accept? _____ Reject? _____ See note in comments

Calibration Comments

* Found in: Main Menu –> Sonde Menu –> Advanced –> Calibration Constants

YSI SONDE CALIBRATION WORKSHEET — Revision 01/01/2007

Sonde ID: 21B100553 Date/Time: 6/27/24 1109 Technician: IT / JC

Reason for Calibration: RG Sampling

Battery Voltage: _____ (6920 & 600 XLM only)

Specific Conductance:

Standard Used (mS) _____

Calibration Values			
	Initial	Post Cal.	Cell Constant:*
	1413	1413	_____ (Range: 5 +/- 0.5)

pH

Calibration Values				
		Initial	Post Cal.	mV
7 Buffer:	(first)	4.00	4.01	158.1 (Range: 0 mV +/- 60)
4 Buffer:	(second)	7.00	7.00	1.7 (Range: +177 from pH 7)
10 Buffer:	(third)	10.07	10.07	_____ (Range: -177 from pH 7)

Note: Span between pH 7 and pH 4, and pH 7 and pH 10 should be aproximately 165 to 180 mV.

DO % Sat. Membrane Changed? Y/N _____ If yes, run probe at least 15 mins before calibration. Optimally, wait 6 to 8 hrs before calibration / use.

DO Charge _____ (Range: 50 +/- 25)

mm Hg: 636.6

Calibration Values %			
	Initial	Post Cal.	DO Gain*
	83.8	96	_____ (Range: 1 (0.7 to 1.5))

Turbidity Wiper Changed? Y/N _____ Wiper parks ~180 degrees from optic port? Y/N _____

Standards Values (NTUs)	Calibration Values	
	Initial	Post Cal.
Zero (Always First)		

Note: Use longer probe guard with black turb probe; shorter guard with grey probe.

Post Calibration DO Sensor Output Test

Turn off handset (650MDS). Wait 1 minute, turn handset on and enter "Run". DO % Sat. must start reading with a high value and descend to the calibration value in 1 to 2 minutes. If it does not, reject.

Note: Disregard the first two readings as they may be affected by the warm-up process.

Accept? _____ Reject? _____ See note in comments

Calibration Comments

* Found in: Main Menu --> Sonde Menu --> Advanced --> Calibration Constants

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 22, 2023

12/13/2023: Rio Grande North and Alameda; E.Coli samples only.

Patrick Chavez
AMAFCA
2600 Prospect Ave NE
Albuquerque, NM 87107
TEL: (505) 884-2215
FAX:

RE: CMC

OrderNo.: 2312802

Dear Patrick Chavez:

Eurofins Environment Testing South Central, LLC received 2 sample(s) on 12/13/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Field Parameters:
- North
  Temp = 5.0^{0}C
  pH = 8.15
  Conductivity = 305
  Dissolved Oxygen = 10.8
- Alameda
  Temp = 7.1^{0}C
  pH = 7.73
  Conductivity = 310
  Dissolved Oxygen = 10.7

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Project: CMC
Lab ID: 2312802-001 **Matrix:** AQUEOUS

Client Sample ID: RG North-20231213
Collection Date: 12/13/2023 12:00:00 PM
Received Date: 12/13/2023 1:54:00 PM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **SMS**	
E. Coli	19.7	1.000	1.000		MPN/100	1	12/14/2023 12:33:00 PM	79369

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Project: CMC
Lab ID: 2312802-002 **Matrix:** AQUEOUS

Client Sample ID: RG Alameda-20231213
Collection Date: 12/13/2023 1:25:00 PM
Received Date: 12/13/2023 1:54:00 PM

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **SMS**	
E. Coli	55.6	1.000	1.000		MPN/100	1	12/14/2023 12:33:00 PM	79369

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: AMAFCA Work Order Number: 2312802 RcptNo: 1

Received By: Juan Rojas 12/13/2023 1:54:00 PM

Completed By: Cheyenne Cason 12/13/2023 3:06:49 PM

Reviewed By: 12/13/23 @ 15:52

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: TME 12/13/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	8.8	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: ~~Daniel B Stephens~~ AMAFCA

Mailing Address: ~~6020 Academy~~

Phone #:

email or Fax#: pchavez@amafca.org

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: CMC

Project #: Dry season FY24

Project Manager: Patrick Chavez

Sampler: DBSA - C. Johannesen

On Ice: ~~☐~~ Yes ☐ No

# of Coolers: 1 Yoqi

Cooler Temp(Including CF): 8.7 +0.1=8.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2312802	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Ecoli - enumeration
12-13-23	1200	AQ	RG North-20231213	1		001											X
12-13-23	1325	AQ	RG Alameda-20231213	1		002											X

Date	Time	Relinquished by	Received by	Via	Date	Time
12-13-23	1340			COO	12/13/23	13:54

Remarks:

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

March 05, 2024

12/13/2023: Rio Grande North and 12/14/2023: Rio Grande South

Patrick Chavez
AMAFCA
2600 Prospect Ave NE
Albuquerque, NM 87107
TEL: (505) 884-2215
FAX:

RE: CMC FY24 Dry

OrderNo.: 2312898

Dear Patrick Chavez:

Eurofins Environment Testing South Central, LLC received 2 sample(s) on 12/14/2023 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued January 26, 2023.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Field Parameters:
- North
  Temp = 5.0°C
  pH = 8.15
  Conductivity = 305
  Dissolved Oxygen = 10.8
- South
  Temp = 9.2°C
  pH = 8.24
  Conductivity = 338
  Dissolved Oxygen = 9.0

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Case Narrative

WO#: **2312898**
Date: **3/5/2024**

CLIENT: AMAFCA
Project: CMC FY24 Dry

Analytical Notes regarding phosphorous:
The “C” fraction contains the results for total phosphorous.
The “D” fraction contains the results for the dissolved phosphorous.

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001B
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5210B: BOD							Analyst: **ejn**	
Biochemical Oxygen Demand	DO Depletion <2.0	2.00	2.00	H	mg/L	1	12/20/2023 9:50:00 AM	79411

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Project: CMC FY24 Dry
Lab ID: 2312898-001C

Client Sample ID: R6 North-20231213
Collection Date: 12/13/2023 12:00:00 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 1664B							Analyst: **AB**	
N-Hexane Extractable Material	ND	8.53	9.58		mg/L	1	12/19/2023 11:40:00 AM	79435

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001D
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: **SNS**	
Nitrate+Nitrite as N	ND	0.11	1.0		mg/L	5	12/19/2023 2:58:45 PM	R10196
SM 4500 NH3: AMMONIA							Analyst: **MCA**	
Nitrogen, Ammonia	1.1	0.57	2.0	JD	mg/L	2	12/21/2023 9:18:00 AM	R10201
SM4500-H+B / 9040C: PH							Analyst: **MCA**	
pH	8.14			H	pH units	1	12/20/2023 1:56:15 PM	R10201
EPA METHOD 365.1: TOTAL PHOSPHOROUS							Analyst: **JMT**	
Phosphorus, Total (As P)	ND	0.050	0.050		mg/L	1	1/6/2024 1:42:00 PM	79761
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: **KS**	
Total Dissolved Solids	204	25.0	50.0		mg/L	1	12/21/2023 7:22:00 PM	79518
EPA 351.2: TKN							Analyst: **MRA**	
Nitrogen, Kjeldahl, Total	ND	0.50	0.50	H	mg/L	1	1/13/2024 3:06:27 PM	79864
SM 2540D: TSS							Analyst: **KS**	
Suspended Solids	6.0	4.0	4.0		mg/L	1	12/21/2023 10:31:00 AM	79522

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001E
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 365.1: TOTAL PHOSPHOROUS							Analyst: **JMT**	
Phosphorus, Total (As P)	ND	0.050	0.050		mg/L	1	1/6/2024 1:46:00 PM	79761

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001F
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: **JRR**	
Calcium	36	0.053	1.0		mg/L	1	1/9/2024 5:14:22 PM	79508
Magnesium	6.6	0.033	1.0		mg/L	1	1/9/2024 5:14:22 PM	79508
SM2340B: HARDNESS							Analyst: **JRR**	
Hardness as CaCO3	120	2.5	6.6		mg/L	1	1/9/2024	R10233

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Project: CMC FY24 Dry
Lab ID: 2312898-001G

Client Sample ID: R6 North-20231213
Collection Date: 12/13/2023 12:00:00 PM
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: **bcv**	
Copper	0.00055	0.000093	0.00050		mg/L	1	12/19/2023 1:35:18 PM	B101952
Lead	ND	0.000032	0.00050		mg/L	1	12/19/2023 1:35:18 PM	B101952

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6 North-20231213
Project: CMC FY24 Dry
Collection Date: 12/13/2023 12:00:00 PM
Lab ID: 2312898-001H
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5220D: COD							Analyst: **AB**	
Chemical Oxygen Demand	110	50.0	50.0		mg/L	1	1/3/2024 10:26:00 AM	79689

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002A
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM 9223B FECAL INDICATOR: E. COLI MPN							Analyst: **SMS**	
E. Coli	235.9	1.000	1.000		MPN/100	1	12/15/2023 12:00:00 PM	79402

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002B
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5210B: BOD							Analyst: **ejn**	
Biochemical Oxygen Demand	DO Depletion <2.0	2.00	2.00		mg/L	1	12/20/2023 9:50:00 AM	79411

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002C
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 1664B							Analyst: **AB**	
N-Hexane Extractable Material	ND	8.73	9.80		mg/L	1	12/19/2023 11:40:00 AM	79435

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002D
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: **SNS**	
Nitrate+Nitrite as N	0.32	0.11	1.0	J	mg/L	5	12/19/2023 3:14:28 PM	R10196
SM 4500 NH3: AMMONIA							Analyst: **MCA**	
Nitrogen, Ammonia	0.84	0.57	2.0	JD	mg/L	2	12/21/2023 9:18:00 AM	R10201
SM4500-H+B / 9040C: PH							Analyst: **MCA**	
pH	8.17			H	pH units	1	12/20/2023 2:00:25 PM	R10201
EPA METHOD 365.1: TOTAL PHOSPHOROUS							Analyst: **JMT**	
Phosphorus, Total (As P)	0.14	0.050	0.050		mg/L	1	1/6/2024 1:48:00 PM	79761
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: **KS**	
Total Dissolved Solids	226	25.0	50.0		mg/L	1	12/21/2023 7:22:00 PM	79518
EPA 351.2: TKN							Analyst: **MRA**	
Nitrogen, Kjeldahl, Total	ND	0.50	0.50		mg/L	1	1/13/2024 3:10:57 PM	79864
SM 2540D: TSS							Analyst: **KS**	
Suspended Solids	22	4.0	4.0		mg/L	1	12/22/2023 10:47:00 AM	79546

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002E
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 365.1: TOTAL PHOSPHOROUS							Analyst: **JMT**	
Phosphorus, Total (As P)	0.065	0.050	0.050		mg/L	1	1/6/2024 1:49:00 PM	79761

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002F
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 200.7: METALS							Analyst: **JRR**	
Calcium	39	0.053	1.0		mg/L	1	1/9/2024 5:18:26 PM	79508
Magnesium	7.0	0.033	1.0		mg/L	1	1/9/2024 5:18:26 PM	79508
SM2340B: HARDNESS							Analyst: **JRR**	
Hardness as CaCO3	130	2.5	6.6		mg/L	1	1/9/2024	R10233

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002G
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA 200.8: DISSOLVED METALS							Analyst: **bcv**	
Copper	0.00075	0.000093	0.00050		mg/L	1	12/19/2023 1:37:35 PM	B101952
Lead	ND	0.000032	0.00050		mg/L	1	12/19/2023 1:37:35 PM	B101952

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: AMAFCA
Client Sample ID: R6South-20231214
Project: CMC FY24 Dry
Collection Date: 12/14/2023 2:45:00 PM
Lab ID: 2312898-002H
Matrix: Aqueous

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5220D: COD							Analyst: **AB**	
Chemical Oxygen Demand	ND	50.0	50.0		mg/L	1	1/3/2024 10:26:00 AM	79689

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Client:	Hall Environmental Analysis Lab	Work Order:	MDL0646
Address:	4901 Hawkins NE Suite D	Project:	2312898
	Albuquerque, NM 87109	Reported:	2/19/2024 09:01
Attn:	Andy Freeman		

Analytical Results Report

Sample Location:	2312898-001I (R6 North-20231213)		
Lab/Sample Number:	MDL0646-01	Collect Date:	12/13/23 12:00
Date Received:	12/19/23 14:44	Collected By:	
Matrix:	Water		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Volatiles							
Tetrahydrofuran	ND	ug/L	0.500	12/22/23 13:35	BKP	EPA 8260D	
Surrogate: 1,2-Dichlorobenzene-d4	*103%*		*70-130*	*12/22/23 13:35*	*BKP*	*EPA 8260D*	
Surrogate: 4-Bromofluorobenzene	*75.8%*		*70-130*	*12/22/23 13:35*	*BKP*	*EPA 8260D*	
Surrogate: Toluene-d8	*97.6%*		*70-130*	*12/22/23 13:35*	*BKP*	*EPA 8260D*	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location:	2312898-001N (R6 North-20231213)		
Lab/Sample Number:	MDL0646-02	Collect Date:	12/13/23 12:00
Date Received:	12/19/23 14:44	Collected By:	
Matrix:	Water		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Semivolatiles							
Dieldrin	ND	ug/L	0.0100	12/27/23 20:52	GPB	EPA 608.3	
Surrogate: DCB	*83.6%*		*40-130*	*12/27/23 20:52*	*GPB*	*EPA 608.3*	
Benzidine	ND	ug/L	1.00	12/29/23 0:29	MAH	EPA 625.1	
Benzo[a]anthracene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Benzo[a]pyrene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Benzo[b]fluoranthene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Benzo[k]fluoranthene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
bis(2-Ethylhexyl)phthalate	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Chrysene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Dibenz[a,h]anthracene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Dibenzofuran	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Pentachlorophenol	ND	ug/L	0.500	12/29/23 0:29	MAH	EPA 625.1	
Surrogate: 2,4,6-Tribromophenol	*92.4%*		*47-122*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: 2-Fluorobiphenyl	*81.2%*		*49-115*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: 2-Fluorophenol	*78.6%*		*30-115*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: Nitrobenzene-d5	*76.2%*		*51-110*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: Phenol-2,3,4,5,6-d5	*81.2%*		*40-120*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	
Surrogate: Terphenyl-d14	*106%*		*50-130*	*12/29/23 0:29*	*MAH*	*EPA 625.1*	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location:	2312898-002I (R6 South-20231214)		
Lab/Sample Number:	MDL0646-03	Collect Date:	12/14/23 14:45
Date Received:	12/19/23 14:44	Collected By:	
Matrix:	Water		

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Volatiles							
Tetrahydrofuran	ND	ug/L	0.500	12/22/23 14:07	BKP	EPA 8260D	
Surrogate: 1,2-Dichlorobenzene-d4	*104%*		*70-130*	*12/22/23 14:07*	*BKP*	*EPA 8260D*	
Surrogate: 4-Bromofluorobenzene	*76.0%*		*70-130*	*12/22/23 14:07*	*BKP*	*EPA 8260D*	
Surrogate: Toluene-d8	*98.1%*		*70-130*	*12/22/23 14:07*	*BKP*	*EPA 8260D*	

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Sample Location: 2312898-002N (R6 South-20231214)
Lab/Sample Number: MDL0646-04 Collect Date: 12/13/23 12:00
Date Received: 12/19/23 14:44 Collected By:
Matrix: Water

Analyte	Result	Units	PQL	Analyzed	Analyst	Method	Qualifier
Semivolatiles							
Dieldrin	ND	ug/L	0.0100	12/27/23 21:10	GPB	EPA 608.3	
Surrogate: DCB	*90.2%*		*40-130*	*12/27/23 21:10*	*GPB*	*EPA 608.3*	
Benzidine	ND	ug/L	1.00	12/29/23 0:56	MAH	EPA 625.1	
Benzo[a]anthracene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Benzo[a]pyrene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Benzo[b]fluoranthene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Benzo[k]fluoranthene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
bis(2-Ethylhexyl)phthalate	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Chrysene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Dibenz[a,h]anthracene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Dibenzofuran	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Pentachlorophenol	ND	ug/L	0.500	12/29/23 0:56	MAH	EPA 625.1	
Surrogate: 2,4,6-Tribromophenol	*90.8%*		*47-122*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: 2-Fluorobiphenyl	*86.7%*		*49-115*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: 2-Fluorophenol	*78.2%*		*30-115*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: Nitrobenzene-d5	*84.8%*		*51-110*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: Phenol-2,3,4,5,6-d5	*82.5%*		*40-120*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	
Surrogate: Terphenyl-d14	*108%*		*50-130*	*12/29/23 0:56*	*MAH*	*EPA 625.1*	

Authorized Signature,

Justin Doty For Todd Taruscio, Laboratory Manager

PQL	Practical Quantitation Limit
ND	Not Detected
MCL	EPA's Maximum Contaminant Level
Dry	Sample results reported on a dry weight basis
*	Not a state-certified analyte

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Quality Control Data

Semivolatiles

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDL0839 - Pesticides										
Blank (BDL0839-BLK1)					Prepared: 12/20/2023 Analyzed: 12/27/2023					
Dieldrin	ND		0.0100	ug/L						
Surrogate: DCB			*1.36*	*ug/L*	*1.25*		*109*	*40-130*		
LCS (BDL0839-BS1)					Prepared: 12/20/2023 Analyzed: 12/27/2023					
Dieldrin	0.488		0.0100	ug/L	0.500		97.6	73-136		
Surrogate: DCB			*1.15*	*ug/L*	*1.25*		*91.7*	*40-130*		
Matrix Spike (BDL0839-MS1)		**Source: MDL0646-02**			Prepared: 12/20/2023 Analyzed: 12/27/2023					
Dieldrin	0.494		0.0100	ug/L	0.500	ND	98.7	66-129		
Surrogate: DCB			*1.00*	*ug/L*	*1.25*		*80.1*	*40-130*		
Matrix Spike Dup (BDL0839-MSD1)		**Source: MDL0646-02**			Prepared: 12/20/2023 Analyzed: 12/27/2023					
Dieldrin	0.507		0.0100	ug/L	0.500	ND	101	66-129	2.67	30
Surrogate: DCB			*1.09*	*ug/L*	*1.25*		*86.9*	*40-130*		
Batch: BDL0939 - SVOC Water										
Blank (BDL0939-BLK1)					Prepared: 12/20/2023 Analyzed: 12/28/2023					
Benzidine	ND		1.00	ug/L						
Di (2-ethylhexyl) phthalate	ND		0.500	ug/L						
Indeno(1,2,3-cd)pyrene	ND		0.500	ug/L						
Dibenzofuran	ND		0.500	ug/L						
Dibenz(a,h)anthracene	ND		0.500	ug/L						
Chrysene	ND		0.500	ug/L						
Pentachlorophenol	ND		0.500	ug/L						
Benzo[k]fluoranthene	ND		0.500	ug/L						
Benzo[b]fluoranthene	ND		0.500	ug/L						
Benzo[a]anthracene	ND		0.500	ug/L						
Benzo[a]pyrene	ND		0.500	ug/L						
Surrogate: Phenol-2,3,4,5,6-d5			*43.7*	*ug/L*	*50.0*		*87.5*	*40-120*		
Surrogate: Nitrobenzene-d5			*21.0*	*ug/L*	*25.0*		*84.0*	*51-110*		
Surrogate: Terphenyl-d14			*27.5*	*ug/L*	*25.0*		*110*	*50-130*		
Surrogate: 2-Fluorophenol			*39.5*	*ug/L*	*50.0*		*78.9*	*30-115*		
Surrogate: 2-Fluorobiphenyl			*21.7*	*ug/L*	*25.0*		*86.6*	*49-115*		
Surrogate: 2,4,6-Tribromophenol			*44.8*	*ug/L*	*50.0*		*89.6*	*47-122*		

Quality Control Data
(Continued)

Semivolatiles (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDL0939 - SVOC Water (Continued)										
LCS (BDL0939-BS1)					Prepared: 12/20/2023 Analyzed: 12/28/2023					
Indeno(1,2,3-cd)pyrene	4.19		0.500	ug/L	5.00		83.8	67-120		
Benzo[k]fluoranthene	5.01		0.500	ug/L	5.00		100	70-122		
Dibenzofuran	4.03		0.500	ug/L	5.00		80.6	70-120		
Dibenz(a,h)anthracene	4.30		0.500	ug/L	5.00		86.0	64-120		
Benzo[a]anthracene	4.61		0.500	ug/L	5.00		92.2	70-120		
Di (2-ethylhexyl) phthalate	4.85		0.500	ug/L	5.00		97.0	61-141		
Benzo[b]fluoranthene	4.63		0.500	ug/L	5.00		92.6	70-120		
Chrysene	4.80		0.500	ug/L	5.00		96.0	70-120		
Benzo[a]pyrene	4.19		0.500	ug/L	5.00		83.8	64-120		
Pentachlorophenol	4.41		0.500	ug/L	5.00		88.2	61-120		
Surrogate: Phenol-2,3,4,5,6-d5			*39.4*	*ug/L*	*50.0*		*78.8*	*40-120*		
Surrogate: Nitrobenzene-d5			*21.2*	*ug/L*	*25.0*		*84.6*	*51-110*		
Surrogate: Terphenyl-d14			*25.7*	*ug/L*	*25.0*		*103*	*50-130*		
Surrogate: 2-Fluorophenol			*34.9*	*ug/L*	*50.0*		*69.7*	*30-115*		
Surrogate: 2-Fluorobiphenyl			*21.9*	*ug/L*	*25.0*		*87.7*	*49-115*		
Surrogate: 2,4,6-Tribromophenol			*43.8*	*ug/L*	*50.0*		*87.7*	*47-122*		
LCS Dup (BDL0939-BSD1)					Prepared: 12/20/2023 Analyzed: 12/28/2023					
Dibenz(a,h)anthracene	4.32		0.500	ug/L	5.00		86.4	64-120	0.464	25
Dibenzofuran	4.36		0.500	ug/L	5.00		87.2	70-120	7.87	25
Indeno(1,2,3-cd)pyrene	4.22		0.500	ug/L	5.00		84.4	67-120	0.713	25
Pentachlorophenol	4.68		0.500	ug/L	5.00		93.6	61-120	5.94	25
Chrysene	4.76		0.500	ug/L	5.00		95.2	70-120	0.837	25
Benzo[a]anthracene	4.56		0.500	ug/L	5.00		91.2	70-120	1.09	25
Di (2-ethylhexyl) phthalate	4.62		0.500	ug/L	5.00		92.4	61-141	4.86	25
Benzo[a]pyrene	4.40		0.500	ug/L	5.00		88.0	64-120	4.89	25
Benzo[b]fluoranthene	4.62		0.500	ug/L	5.00		92.4	70-120	0.216	25
Benzo[k]fluoranthene	5.00		0.500	ug/L	5.00		100	70-122	0.200	25
Surrogate: Phenol-2,3,4,5,6-d5			*46.2*	*ug/L*	*50.0*		*92.4*	*40-120*		
Surrogate: Nitrobenzene-d5			*23.2*	*ug/L*	*25.0*		*92.8*	*51-110*		
Surrogate: Terphenyl-d14			*26.0*	*ug/L*	*25.0*		*104*	*50-130*		
Surrogate: 2-Fluorophenol			*46.5*	*ug/L*	*50.0*		*93.0*	*30-115*		
Surrogate: 2-Fluorobiphenyl			*23.9*	*ug/L*	*25.0*		*95.7*	*49-115*		
Surrogate: 2,4,6-Tribromophenol			*48.7*	*ug/L*	*50.0*		*97.4*	*47-122*		

Quality Control Data
(Continued)

Volatiles

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDL0895 - VOC										
Blank (BDL0895-BLK1)					Prepared & Analyzed: 12/21/2023					
Tetrahydrofuran	ND		0.500	ug/L						
Surrogate: 4-Bromofluorobenzene			*19.1*	*ug/L*	*20.0*		*95.4*	*70-130*		
Surrogate: Toluene-d8			*19.5*	*ug/L*	*20.0*		*97.7*	*70-130*		
Surrogate: 1,2-Dichlorobenzene-d4			*20.0*	*ug/L*	*20.0*		*100*	*70-130*		
LCS (BDL0895-BS1)					Prepared & Analyzed: 12/22/2023					
Tetrahydrofuran	20.0		0.500	ug/L	20.0		100	80-120		

Anatek Labs, Inc.

1282 Alturas Drive - Moscow, ID 83843 - (208) 883-2839 - email moscow@anateklabs.com
504 E Sprague Ste. D - Spokane, WA 99202 - (509) 838-3999 - email spokane@anateklabs.com

Quality Control Data
(Continued)

Volatiles (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BDL0895 - VOC (Continued)										
LCS (BDL0895-BS1)					Prepared & Analyzed: 12/22/2023					
Surrogate: Toluene-d8			*20.0*	*ug/L*	*20.0*		*99.8*	*70-130*		
Surrogate: 4-Bromofluorobenzene			*16.0*	*ug/L*	*20.0*		*80.2*	*70-130*		
Surrogate: 1,2-Dichlorobenzene-d4			*20.0*	*ug/L*	*20.0*		*100*	*70-130*		

eurofins | Environment Testing

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

MDL0646

Due: 01/04/24

SUB CONTRATOR: **Anatek ID**	COMPANY: **Anatek Labs, Inc.**	PHONE: **(208) 883-2839**	FAX: **(208) 882-9246**
ADDRESS: **1282 Alturas Dr**		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: **Moscow, ID 83843**			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2312898-001I	R6 North-20231213	VOAHCL	Aqueous	12/13/2023 12:00:00 PM	3	Tetrahydrofuran by 8260 only
2	2312898-001N	R6 North-20231213	1LAMGU	Aqueous	12/13/2023 12:00:00 PM	2	608, 625 See Attached-
3	2312898-002I	R6South-20231214	VOAHCL	Aqueous	12/14/2023 2:45:00 PM	3	Tetrahydrofuran by 8260 only
4	2312898-002N	R6South-20231214	1LAMGU	Aqueous	12/14/2023 2:45:00 PM	2	608, 625 See Attached-

SPECIAL INSTRUCTIONS / COMMENTS:

Include the LAB ID and CLIENT SAMPLE ID on final reports. Email results to Hall.Lab@et.eurofinsus.com. For Questions email Hall.samplecontrol@et.eurofinsus.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 12/15/2023	Time: 2:48 PM	Received By:	Date: 12/19/23	Time: 14:44
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☑ **RUSH** Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

Temp of samples _____ °C Attempt to Cool ? _____

Comments: _____

Collaborative Monitoring Cooperative - Analyses List
Attach to Chain of Custody

Analyte (Bold Indicates WQS)	CAS #	Fraction	Method #	MDL (ug/L)
Hardness (Ca + Mg)	NA	Total	200.7	2.4
Lead	7439-92-1	Dissolved	200.8	0.09
Copper	7440-50-8	Dissolved	200.8	1.06
Ammonia + organic nitrogen	7664-41-7	Total	350.1	31.32
Total Kjehldal Nitrogen	17778-88-0	Total	351.2	58.78
Nitrate + Nitrite	14797-55-8	Total	353.2	10.17
Polychlorinated biphenyls (PCBs)	1336-36-3	Total	1668	0.014
Tetrahydrofuran (THF)	109-99-9	Total	8260C	7.9
bis(2-Ethylhexyl)phthalate	117-81-7	Total	8270D	0.2
Dibenzofuran	132-64-9	Total	8270D	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	Total	8270D	0.2
Benzo(b)fluoranthene	205-99-2	Total	8270D	0.1
Benzo(k)fluoranthene	207-08-9	Total	8270D	0.1
Chrysene	218-01-9	Total	8270D	0.2
Benzo(a)pyrene	50-32-8	Total	8270D	0.3
Dibenzo(a,h)anthracene	53-70-3	Total	8270D	0.3
Benzo(a)anthracene	56-55-3	Total	8270D	0.2
Dieldrin	60-57-1	Total	8270D	0.1
Pentachlorophenol	87-86-5	Total	8270D	0.2
Benzidine	92-87-5	Total	8270D	0.1
Chemical Oxygen Demand	E1641638[2]	Total	HACH	5100
Gross alpha (adjusted)	NA	Total	Method 900	0.1 pCi/L
Total Dissolved Solids	E1642222[2]	Total	SM 2540C	60.4
Total Suspended Solids	NA	Total	SM 2540D	3450
Biological Oxygen Demand	N/A	Total	Standard Methods	930
Oil and Grease		Total	1664A	5000
Ecoli			SM 9223B	
pH			SM 4500	
Phosphorus		Dissolved	365.1	100
Phosphorus		Total	365.1	100
Chromium IV		Total	3500Cr C-2011	100

Anatek Labs, Inc.

Sample Receipt and Preservation Form

Client Name: Hall

TAT: (Normal) RUSH: _____ days

Samples Received From: (FedEx) UPS USPS Client Courier Other: —

Custody Seal on Cooler/Box: (Yes) No Custody Seals Intact: (Yes) No N/A

Number of Coolers/Boxes: 1 Type of Ice: Wet Ice (Ice Packs) Dry Ice None

Packing Material: (Bubble Wrap) Bags Foam/Peanuts (Paper) None Other: —

Cooler Temp As Read (°C): 3.8 Cooler Temp Corrected (°C): — Thermometer Used: 125

				Comments:
Samples Received Intact?	(Yes)	No	N/A	
Chain of Custody Present/Complete?	(Yes)	No	N/A	
Labels and Chains Agree?	(Yes)	No	N/A	
Samples Received Within Hold Time?	(Yes)	No	N/A	
Correct Containers Received?	(Yes)	No	N/A	
Anatek Bottles Used?	Yes	(No)	Unknown	
Total Number of Sample Bottles Received: 10				

				Initial pH:	pH Paper ID:
Samples Properly Preserved?	(Yes)	No	N/A	<2 or	
If No, record preservation and pH-after details					
VOC Vials Free of Headspace (<6mm)?	(Yes)	No	N/A		
VOC Trip Blanks Present?	Yes	(No)	N/A		

Record preservatives (and lot numbers, if known) for containers below:

GIL-608/625 x 4
G44 HCl 8260 by Tetrahydrofuran x 6

Notes, comments, etc. (also use this space if contacting the client - record names and date/time)

Received/Inspected By: SM Date/Time: 12/19/23 14:44

Form F19.01 - Eff 1 Dec 2022

ANALYTICAL REPORT

December 27, 2023

Hall Environmental Analysis Laboratory

Sample Delivery Group:	L1689671
Samples Received:	12/19/2023
Project Number:	
Description:	

Report To: Andy Freeman
4901 Hawkins NE
Albuquerque, NM 87109

Entire Report Reviewed By:

John Hawkins
Project Manager

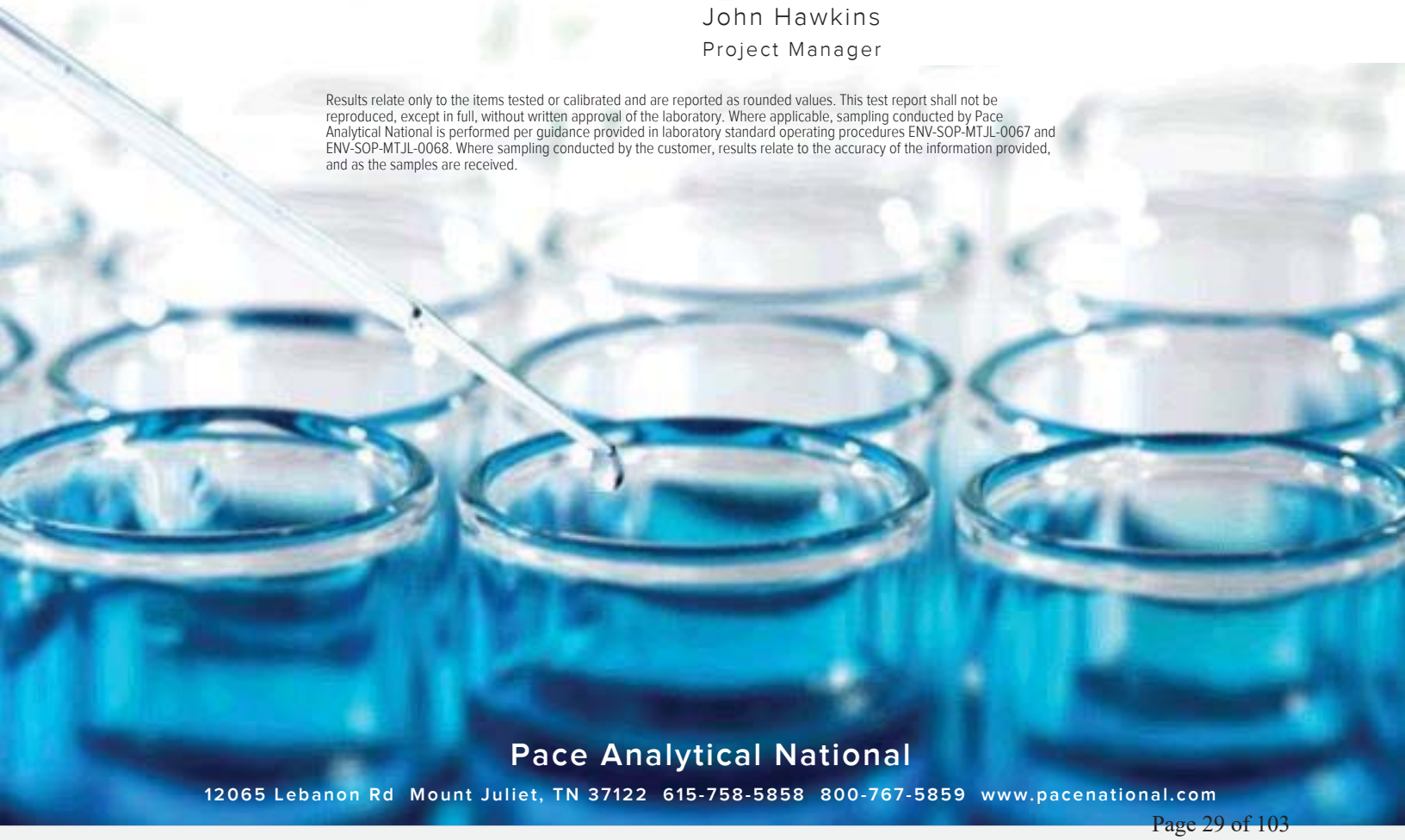


TABLE OF CONTENTS

2312898-001K R6 NORTH-20231213 L1689671-01 GW

Collected by	Collected date/time	Received date/time
	12/13/23 12:00	12/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 3500Cr C-2011	WG2192881	1	12/27/23 02:50	12/27/23 02:50	SET	Mt. Juliet, TN

2312898-002K R6SOUTH-20231214 L1689671-02 GW

Collected by	Collected date/time	Received date/time
	12/14/23 14:45	12/19/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 3500Cr C-2011	WG2192881	1	12/27/23 03:01	12/27/23 03:01	SET	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

John Hawkins
Project Manager

Wet Chemistry by Method 3500Cr C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.000500	1	12/27/2023 02:50	WG2192881

Wet Chemistry by Method 3500Cr C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		0.000500	1	12/27/2023 03:01	WG2192881

Method Blank (MB)

(MB) R4016926-1 12/27/23 01:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hexavalent Chromium	U		0.000150	0.000500

L1688418-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1688418-02 12/27/23 02:06 • (DUP) R4016926-3 12/27/23 02:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.00166	0.00165	1	0.871		20

L1691175-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1691175-01 12/27/23 04:51 • (DUP) R4016926-5 12/27/23 05:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4016926-2 12/27/23 01:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	0.00200	0.00201	101	90.0-110	

L1689942-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1689942-01 12/27/23 03:12 • (MS) R4016926-4 12/27/23 03:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	0.0500	ND	0.0454	90.8	1	90.0-110	

L1691177-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1691177-01 12/27/23 05:35 • (MS) R4016926-6 12/27/23 06:07 • (MSD) R4016926-7 12/27/23 06:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium	0.0500	ND	0.0465	0.0463	92.9	92.6	1	90.0-110			0.328	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

eurofins | Environment Testing

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

SUB CONTRATOR: Pace TN	COMPANY: PACE TN	PHONE: (800) 767-5859	FAX: (615) 758-5859
ADDRESS: 12065 Lebanon Rd		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: Mt. Juliet, TN 37122			

A120

L1689671

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2312898-001K	R6 North-20231213	120mL	Aqueous	12/13/2023 12:00:00 PM	1	Cr6 -01
2	2312898-002K	R6South-20231214	120mL	Aqueous	12/14/2023 2:45:00 PM	1	Cr6 -02

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	Y N	VOA Zero Headspace:	Y N
COC Signed/Accurate:	✓Y N	Pres. Correct/Check:	Y N
Bottles arrive intact:	✓Y N		
Correct bottles used:	✓Y N		
Sufficient volume sent:	✓Y N		
RA Screen <0.5 mR/hr:	✓Y N		

SPECIAL INSTRUCTIONS / COMMENTS:

Include the LAB ID and CLIENT SAMPLE ID on final reports. Email results to Hall.Lab@et.eurofinsus.com. For Questions email Hall.samplecontrol@et.eurofinsus.com. Please return all coolers and blue ice. Thank you.

Relinquished By: [signature]	Date: 12/15/2023	Time: 8:45 AM	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By: [signature]	Date: 12-19-23	Time: 9:00

TAT: Standard ☑ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:

☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY

MS98 Temp of samples 2.7+0=2.7 °C Attempt to Cool ?

Comments: 6643 4204 9561

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Data Submittal
EET South Central Hall Environmental Analysis Laboratory
4901 Hawkins NE
Suite D
Albuquerque, New Mexico 87109

Generated 1/18/2024 3:40:00 PM

JOB DESCRIPTION

2312898
2312898

JOB NUMBER

160-52632-1

Eurofins St. Louis
13715 Rider Trail North
Earth City MO 63045

See page two for job notes and contact information.

Job Notes

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

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

Authorization

Generated
1/18/2024 3:40:00 PM

Authorized for release by
Erika Jordan, Project Manager
erika.jordan@et.eurofinsus.com
(314)298-8566

Table of Contents

CASE NARRATIVE

Client: Hall Environmental Analysis Laboratory

Project: 2312898

Report Number: 160-52632-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition, all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method.

Eurofins Environment Testing attests to the validity of the laboratory data generated by Eurofins facilities reported herein. All analyses performed by Eurofins Environment Testing facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins Environment Testing's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Calculations are performed before rounding to avoid round-off errors in calculated results.

Proper preservation was noted for the methods performed on these samples, unless otherwise detailed below.

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

The matrix for the Method Blank and LCS/LCSD is as close to the samples as can be reasonably achieved. Detailed information can be found in the most current revision of the associated SOP.

The method blank (MB) z-score is within limits, unless stated otherwise below.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.

Reference the chain of custody and receipt report for any variations on receipt conditions.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

Receipt
The samples were received on 12/19/2023 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved. The temperature of the cooler at receipt time was 5.6°C

Method 200.8 - Metals (ICP/MS)
Samples 2312898-001M/ R6 North-20231213 (52632-1) and 2312898-002M/ R6 South-20231214 (52632-2) were analyzed for Metals (ICP/MS). The samples were prepared on 12/20/2023 and analyzed on 12/21/2023.

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

Method 900.0 - Gross Alpha and Gross Beta Radioactivity
Samples 2312898-001M/ R6 North-20231213 (52632-1) and 2312898-002M/ R6 South-20231214 (52632-2) were analyzed for Gross Alpha and Gross Beta Radioactivity. The samples were prepared on 12/21/2023 and analyzed on 1/12/2024.

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

Method Gross Alpha Adj - Gross Alpha Adjusted

Job ID: 160-52632-1 (Continued) Eurofins St. Louis

Samples 2312898-001M/ R6 North-20231213 (52632-1) and 2312898-002M/ R6 South-20231214 (52632-2) were analyzed for Gross Alpha Adjusted. The samples were prepared on 12/20/2023 and analyzed on 12/21/2023 and 1/12/2024.

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

eurofins | Environment Testing

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

SUB CONTRATOR: Eurofins St. Louis	COMPANY: Eurofins TestAmerica		PHONE: (314) 298-8566	FAX: (314) 298-8757	
ADDRESS: 13715 Rider Trail North			ACCOUNT #:	EMAIL:	
CITY, STATE, ZIP: Earth City, MO 63045					

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2312898-001M	R6 North-20231213	1LHDPEHNO3	Aqueous	12/13/2023 12:00:00 PM	2	Adjusted Gross Alpha -Pease Apply ICO Pricing-
2	2312898-002M	R6South-20231214	1LHDPEHNO3	Aqueous	12/14/2023 2:45:00 PM	2	Adjusted Gross Alpha -Pease Apply ICO Pricing-

160-52632 Chain of Custody

SPECIAL INSTRUCTIONS / COMMENTS:

Include the LAB ID and CLIENT SAMPLE ID on final reports. Email results to Hall.Lab@et.eurofinsus.com. For Questions email Hall.samplecontrol@et.eurofinsus.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date: 12/15/2023	Time: 2:49 PM	Received By:	Date: 12/19/23	Time: 0950
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☐ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments _____

Login Sample Receipt Checklist

Client: EET South Central Hall Environmental Analysis Laboratory

Job Number: 160-52632-1
SDG Number: 2312898

Login Number: 52632
List Number: 1
Creator: Thornley, Richard W

List Source: Eurofins St. Louis

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.	N/A	
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Definitions/Glossary

Client: EET South Central Hall Environmental Analysis Laboratory
Project/Site: 2312898

Job ID: 160-52632-1
SDG: 2312898

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

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

Method Summary

Client: EET South Central Hall Environmental Analysis Laboratory
Project/Site: 2312898

Job ID: 160-52632-1
SDG: 2312898

Method	Method Description	Protocol	Laboratory
200.8	Metals (ICP/MS)	EPA	EET SL
900.0	Gross Alpha and Gross Beta Radioactivity	EPA	EET SL
Gross Alpha Adj	Gross Alpha Adjusted	SM	EET SL
200.7/200.8	Preparation, Metals	EPA	EET SL
Evaporation	Preparation, Evaporation	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: EET South Central Hall Environmental Analysis Laboratory
Project/Site: 2312898

Job ID: 160-52632-1
SDG: 2312898

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-52632-1	2312898-001M/ R6 North-20231213	Water	12/13/23 12:00	12/19/23 09:30
160-52632-2	2312898-002M/ R6 South-20231214	Water	12/14/23 14:45	12/19/23 09:30

Client Sample ID: 2312898-001M/ R6 North-20231213
Lab Sample ID: 160-52632-1
Date Collected: 12/13/23 12:00
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	2.0		1.0	0.15	ug/L		12/20/23 13:07	12/21/23 18:29	2

Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	3.56		1.67	1.72	3.00	2.17	pCi/L	12/21/23 09:43	01/12/24 07:28	1

Method: SM Gross Alpha Adj - Gross Alpha Adjusted

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Adjusted Gross Alpha	2.25		1.67	1.72	3.00	2.17	pCi/L		01/12/24 07:28	1

Client Sample ID: 2312898-002M/ R6 South-20231214
Lab Sample ID: 160-52632-2
Date Collected: 12/14/23 14:45
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	2.3		1.0	0.15	ug/L		12/20/23 13:07	12/21/23 18:43	2

Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	2.48		1.38	1.40	3.00	1.88	pCi/L	12/21/23 09:43	01/12/24 07:29	1

Method: SM Gross Alpha Adj - Gross Alpha Adjusted

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Adjusted Gross Alpha	0.945	U	1.39	1.43	3.00	1.88	pCi/L		01/12/24 07:29	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 160-641644/1-A
Matrix: Water
Analysis Batch: 641944
Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641644

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND		1.0	0.15	ug/L		12/20/23 13:07	12/21/23 18:01	2

Lab Sample ID: LCS 160-641644/2-A
Matrix: Water
Analysis Batch: 641944
Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641644

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1000	1080		ug/L		108	85 - 115

Lab Sample ID: 160-52632-1 MS
Matrix: Water
Analysis Batch: 641944
Client Sample ID: 2312898-001M/ R6 North-20231213
Prep Type: Total/NA
Prep Batch: 641644

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	2.0		1000	1070		ug/L		107	70 - 130

Lab Sample ID: 160-52632-1 MSD
Matrix: Water
Analysis Batch: 641944
Client Sample ID: 2312898-001M/ R6 North-20231213
Prep Type: Total/NA
Prep Batch: 641644

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	2.0		1000	1070		ug/L		107	70 - 130	0	20

Method: 900.0 - Gross Alpha and Gross Beta Radioactivity

Lab Sample ID: MB 160-641799/1-A
Matrix: Water
Analysis Batch: 643779
Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641799

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	-0.09837	U	0.637	0.637	3.00	1.24	pCi/L	12/21/23 09:43	01/10/24 07:42	1

Lab Sample ID: LCS 160-641799/2-A
Matrix: Water
Analysis Batch: 643779
Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641799

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Alpha	49.3	53.21		7.79	3.00	2.08	pCi/L	108	75 - 125

QC Association Summary

Client: EET South Central Hall Environmental Analysis Laboratory
Project/Site: 2312898

Job ID: 160-52632-1
SDG: 2312898

Metals

Prep Batch: 641644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-52632-1	2312898-001M/ R6 North-20231213	Total/NA	Water	200.7/200.8	
160-52632-2	2312898-002M/ R6 South-20231214	Total/NA	Water	200.7/200.8	
MB 160-641644/1-A	Method Blank	Total/NA	Water	200.7/200.8	
LCS 160-641644/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
160-52632-1 MS	2312898-001M/ R6 North-20231213	Total/NA	Water	200.7/200.8	
160-52632-1 MSD	2312898-001M/ R6 North-20231213	Total/NA	Water	200.7/200.8	

Analysis Batch: 641944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-52632-1	2312898-001M/ R6 North-20231213	Total/NA	Water	200.8	641644
160-52632-2	2312898-002M/ R6 South-20231214	Total/NA	Water	200.8	641644
MB 160-641644/1-A	Method Blank	Total/NA	Water	200.8	641644
LCS 160-641644/2-A	Lab Control Sample	Total/NA	Water	200.8	641644
160-52632-1 MS	2312898-001M/ R6 North-20231213	Total/NA	Water	200.8	641644
160-52632-1 MSD	2312898-001M/ R6 North-20231213	Total/NA	Water	200.8	641644

Rad

Prep Batch: 641799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-52632-1	2312898-001M/ R6 North-20231213	Total/NA	Water	Evaporation	
160-52632-2	2312898-002M/ R6 South-20231214	Total/NA	Water	Evaporation	
MB 160-641799/1-A	Method Blank	Total/NA	Water	Evaporation	
LCS 160-641799/2-A	Lab Control Sample	Total/NA	Water	Evaporation	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Reporting Alberquerque
Eurofins Environment Testing South Central LLC
4901 Hawkins NE
Albuquerque, New Mexico 87109

Generated 1/25/2024 10:58:43 AM

JOB DESCRIPTION

2312898

JOB NUMBER

320-108192-1

Eurofins Sacramento
880 Riverside Parkway
West Sacramento CA 95605

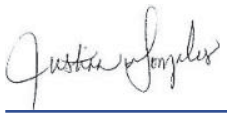
See page two for job notes and contact information.

Job Notes

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

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

Authorization



Generated
1/25/2024 10:58:43 AM

Authorized for release by
Justinn Gonzales, Project Manager I
Justinn.Gonzales@et.eurofinsus.com
(916)374-4344

Table of Contents

Qualifiers

Dioxin

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
G	The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

Glossary

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

Job ID: 320-108192-1 Eurofins Sacramento

Job Narrative
320-108192-1

Receipt
The samples were received on 12/19/2023 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 was 0.8º C.

Dioxin
Methods 1668A: Ion abundance ratios are outside criteria for the Isotope Dilution Analyte (IDA) associated with the following samples: 2312898-001 - R6 North-20231213 (320-108192-1) and 2312898-002 - R6South-20231214 (320-108192-2). The theoretical area for the IDA was used to quantitate recovery and target concentration.

Methods 1668A: The ion abundance ratio is outside criteria for the Internal Standard PCB-9L associated with the following sample: 2312898-002 - R6South-20231214 (320-108192-2). The theoretical area for the Internal Standard was used to quantitate the related Isotope Dilution Analytes (IDA) recoveries.

Method 1668A: The Isotope Dilution Analyte (IDA) recovery associated with the following samples is below the method recommended limit: 2312898-001 - R6 North-20231213 (320-108192-1) and 2312898-002 - R6South-20231214 (320-108192-2). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the samples.

Method 1668A: Ion abundance ratios are outside criteria for the surrogate (SU) associated with the following samples: 2312898-002 - R6South-20231214 (320-108192-2). The theoretical area for the SU was used to quantitate recovery.

Method 1668A: The following sample exhibited elevated noise or matrix interferences for one or more analytes causing elevation of the detection limit (EDL): 2312898-002 - R6South-20231214 (320-108192-2). The reporting limit (RL) for the affected analytes has been raised to be equal to the EDL, and a "G" qualifier applied.

Method 1668A: The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: 2312898-001 - R6 North-20231213 (320-108192-1). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method 1668A: Ion abundance ratios are outside criteria for the Isotope Dilution Analyte (IDA) associated with the following sample: 2312898-002 - R6South-20231214 (320-108192-2). The theoretical area for the IDA was used to quantitate recovery and target concentration.

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

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

Detection Summary

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213 Lab Sample ID: 320-108192-1

No Detections.

Client Sample ID: 2312898-002 - R6South-20231214 Lab Sample ID: 320-108192-2

Analyte	Result	Qualifier	RL	EDL	Unit	Dil Fac	D	Method	Prep Type
PCB-44	17	J	120	2.2	pg/L	1		1668A	Total/NA
PCB-47	17	J	120	2.2	pg/L	1		1668A	Total/NA
PCB-49	3.8	J q	42	2.0	pg/L	1		1668A	Total/NA
PCB-52	14	J	100	2.3	pg/L	1		1668A	Total/NA
PCB-65	17	J	120	2.2	pg/L	1		1668A	Total/NA
PCB-69	3.8	J q	42	2.0	pg/L	1		1668A	Total/NA
PCB-85	12	J q	62	1.2	pg/L	1		1668A	Total/NA
PCB-90	11	J q	120	1.5	pg/L	1		1668A	Total/NA
PCB-95	12	J	100	1.7	pg/L	1		1668A	Total/NA
PCB-101	11	J q	120	1.5	pg/L	1		1668A	Total/NA
PCB-113	11	J q	120	1.5	pg/L	1		1668A	Total/NA
PCB-116	12	J q	62	1.2	pg/L	1		1668A	Total/NA
PCB-117	12	J q	62	1.2	pg/L	1		1668A	Total/NA
PCB-118	9.2	J q	42	1.2	pg/L	1		1668A	Total/NA
PCB-129	14	J q	62	0.99	pg/L	1		1668A	Total/NA
PCB-138	14	J q	62	0.99	pg/L	1		1668A	Total/NA
PCB-147	14	J q	42	1.0	pg/L	1		1668A	Total/NA
PCB-149	14	J q	42	1.0	pg/L	1		1668A	Total/NA
PCB-153	11	J	42	0.80	pg/L	1		1668A	Total/NA
PCB-160	14	J q	21	0.99	pg/L	1		1668A	Total/NA
PCB-163	14	J q	62	0.99	pg/L	1		1668A	Total/NA
PCB-168	11	J	42	0.80	pg/L	1		1668A	Total/NA
PCB-180	11	J q	42	1.7	pg/L	1		1668A	Total/NA
PCB-193	11	J q	42	1.7	pg/L	1		1668A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213
Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-1
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		98	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-2	ND		98	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-3	ND		150	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-4	ND		98	13	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-5	ND		20	15	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-6	ND		20	14	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-7	ND		39	15	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-8	ND		39	14	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-9	ND		39	15	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-10	ND		39	8.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-11	ND		150	16	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-12	ND		200	16	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-13	ND		200	16	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-14	ND		39	16	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-15	ND		98	12	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-16	ND		39	6.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-17	ND		39	6.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-18	ND		39	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-19	ND		39	6.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-20	ND		79	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-21	ND		39	4.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-22	ND		20	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-23	ND		39	4.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-24	ND		20	4.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-25	ND		20	3.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-26	ND		79	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-27	ND		20	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-28	ND		79	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-29	ND		79	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-30	ND		39	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-31	ND		98	4.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-32	ND		20	4.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-33	ND		39	4.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-34	ND		20	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-35	ND		39	4.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-36	ND		20	4.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-37	ND		20	4.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-38	ND		20	4.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-39	ND		39	4.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-40	ND		39	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-41	ND		39	2.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-42	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-43	ND		20	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-44	ND		120	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-45	ND		39	2.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-46	ND		20	2.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-47	ND		120	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-48	ND		20	2.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-49	ND		39	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213
Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-1
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-51	ND		39	2.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-52	ND		98	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-53	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-54	ND		39	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-55	ND		39	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-56	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-57	ND		20	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-58	ND		20	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-59	ND		59	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-60	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-61	ND		160	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-62	ND		59	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-63	ND		39	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-64	ND		39	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-65	ND		120	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-66	ND		39	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-67	ND		20	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-68	ND		39	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-69	ND		39	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-70	ND		160	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-71	ND		39	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-72	ND		20	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-73	ND		20	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-74	ND		160	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-75	ND		59	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-76	ND		160	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-77	ND		20	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-78	ND		20	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-79	ND		39	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-80	ND		39	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-81	ND		20	2.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-82	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-83	ND		20	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-84	ND		39	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-85	ND		59	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-86	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-87	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-88	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-89	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-90	ND		120	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-91	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-92	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-93	ND		79	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-94	ND		39	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-95	ND		98	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-96	ND		20	0.71	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-97	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-98	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213
Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-1
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-100	ND		79	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-101	ND		120	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-102	ND		39	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-103	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-104	ND		39	0.79	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-105	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-106	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-107	ND		39	0.92	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-108	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-109	ND		20	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-110	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-111	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-112	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-113	ND		120	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-114	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-115	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-116	ND		59	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-117	ND		59	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-118	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-119	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-120	ND		20	0.94	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-121	ND		20	0.99	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-122	ND		39	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-123	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-124	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-125	ND		120	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-126	ND		20	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-127	ND		20	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-128	ND		79	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-129	ND		59	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-130	ND		20	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-131	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-132	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-133	ND		20	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-134	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-135	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-136	ND		20	0.86	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-137	ND		20	0.86	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-138	ND		59	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-139	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-140	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-141	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-142	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-143	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-144	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-145	ND		20	0.91	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-146	ND		20	0.83	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-147	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1

Client Sample ID: 2312898-001 - R6 North-20231213
Lab Sample ID: 320-108192-1
Date Collected: 12/13/23 12:00
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		20	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-149	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-150	ND		20	0.86	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-151	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-152	ND		20	0.89	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-153	ND		39	0.83	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-154	ND		20	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-155	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-156	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-157	ND		39	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-158	ND		20	0.85	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-159	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-160	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-161	ND		20	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-162	ND		39	1.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-163	ND		59	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-164	ND		20	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-165	ND		20	0.94	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-166	ND		79	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-167	ND		39	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-168	ND		39	0.83	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-169	ND		20	1.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-170	ND		39	3.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-171	ND		39	2.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-172	ND		20	3.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-173	ND		39	2.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-174	ND		20	3.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-175	ND		20	1.8	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-176	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-177	ND		20	2.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-178	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-179	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-180	ND		39	2.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-181	ND		20	2.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-182	ND		20	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-183	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-184	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-185	ND		39	3.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-186	ND		20	1.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-187	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-188	ND		20	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-189	ND		20	1.7	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-190	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-191	ND		39	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-192	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-193	ND		39	2.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-194	ND		39	2.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-195	ND		20	2.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-196	ND		20	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213
Date Collected: 12/13/23 12:00
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-1
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		20	1.3	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-198	ND		39	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-199	ND		39	1.9	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-200	ND		20	2.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-201	ND		20	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-202	ND		20	1.6	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-203	ND		20	2.0	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-204	ND		20	1.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-205	ND		20	2.1	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-206	ND		39	4.2	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-207	ND		20	3.4	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-208	ND		20	3.5	pg/L		01/10/24 07:52	01/19/24 18:05	1
PCB-209	ND		39	1.4	pg/L		01/10/24 07:52	01/19/24 18:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*51*		*15 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-3L	*51*		*15 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-4L	*42*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-15L	*48*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-19L	*45*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-37L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-54L	*29*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-77L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-81L	*53*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-104L	*31*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-105L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-114L	*56*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-118L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-123L	*57*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-126L	*56*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-155L	*50*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-156L	*99*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-156L/157L	*99*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-157L	*99*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-167L	*98*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-169L	*103*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-188L	*24*	**5-*	*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-189L	*54*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-202L	*43*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-205L	*66*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-206L	*60*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-208L	*54*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-209L	*46*		*25 - 150*	*01/10/24 07:52*	*01/19/24 18:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*79*		*30 - 135*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-111L	*86*		*30 - 135*	*01/10/24 07:52*	*01/19/24 18:05*	*1*
PCB-178L	*67*		*30 - 135*	*01/10/24 07:52*	*01/19/24 18:05*	*1*

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-002 - R6South-20231214
Date Collected: 12/14/23 14:45
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-2
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		100	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-2	ND		100	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-3	ND		160	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-4	ND		100	9.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-5	ND	G	22	22	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-6	ND		21	20	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-7	ND		42	22	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-8	ND		42	20	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-9	ND		42	22	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-10	ND		42	6.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-11	ND		160	23	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-12	ND		210	23	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-13	ND		210	23	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-14	ND		42	23	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-15	ND		100	18	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-16	ND		42	6.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-17	ND		42	6.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-18	ND		42	4.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-19	ND		42	6.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-20	ND		83	4.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-21	ND		42	5.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-22	ND		21	4.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-23	ND		42	5.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-24	ND		21	4.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-25	ND		21	4.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-26	ND		83	5.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-27	ND		21	4.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-28	ND		83	4.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-29	ND		83	5.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-30	ND		42	4.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-31	ND		100	5.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-32	ND		21	4.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-33	ND		42	5.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-34	ND		21	5.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-35	ND		42	4.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-36	ND		21	5.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-37	ND		21	5.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-38	ND		21	5.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-39	ND		42	5.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-40	ND		42	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-41	ND		42	3.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-42	ND		42	2.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-43	ND		21	2.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-44	**17**	**J**	120	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-45	ND		42	2.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-46	ND		21	3.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-47	**17**	**J**	120	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-48	ND		21	2.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-49	**3.8**	**J q**	42	2.0	pg/L		01/10/24 07:52	01/19/24 19:07	1

Client Sample ID: 2312898-002 - R6South-20231214
Lab Sample ID: 320-108192-2
Date Collected: 12/14/23 14:45
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND		42	2.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-51	ND		42	2.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-52	**14**	**J**	100	2.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-53	ND		42	2.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-54	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-55	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-56	ND		21	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-57	ND		21	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-58	ND		21	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-59	ND		62	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-60	ND		42	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-61	ND		170	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-62	ND		62	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-63	ND		42	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-64	ND		42	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-65	**17**	**J**	120	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-66	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-67	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-68	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-69	**3.8**	**J q**	42	2.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-70	ND		170	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-71	ND		42	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-72	ND		21	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-73	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-74	ND		170	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-75	ND		62	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-76	ND		170	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-77	ND		21	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-78	ND		21	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-79	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-80	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-81	ND		21	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-82	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-83	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-84	ND		42	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-85	**12**	**J q**	62	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-86	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-87	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-88	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-89	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-90	**11**	**J q**	120	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-91	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-92	ND		42	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-93	ND		83	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-94	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-95	**12**	**J**	100	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-96	ND		21	0.72	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-97	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-98	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1

Client Sample ID: 2312898-002 - R6South-20231214
Lab Sample ID: 320-108192-2
Date Collected: 12/14/23 14:45
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	ND		42	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-100	ND		83	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-101	**11**	**J q**	120	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-102	ND		42	1.8	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-103	ND		42	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-104	ND		42	0.96	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-105	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-106	ND		42	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-107	ND		42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-108	ND		120	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-109	ND		21	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-110	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-111	ND		42	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-112	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-113	**11**	**J q**	120	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-114	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-115	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-116	**12**	**J q**	62	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-117	**12**	**J q**	62	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-118	**9.2**	**J q**	42	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-119	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-120	ND		21	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-121	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-122	ND		42	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-123	ND		42	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-124	ND		42	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-125	ND		120	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-126	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-127	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-128	ND		83	0.98	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-129	**14**	**J q**	62	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-130	ND		21	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-131	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-132	ND		21	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-133	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-134	ND		42	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-135	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-136	ND		21	0.84	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-137	ND		21	0.84	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-138	**14**	**J q**	62	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-139	ND		42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-140	ND		42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-141	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-142	ND		21	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-143	ND		42	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-144	ND		21	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-145	ND		21	0.88	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-146	ND		21	0.80	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-147	**14**	**J q**	42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1

Client Sample ID: 2312898-002 - R6South-20231214
Lab Sample ID: 320-108192-2
Date Collected: 12/14/23 14:45
Matrix: Water
Date Received: 12/19/23 09:30

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-149	**14**	**J q**	42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-150	ND		21	0.83	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-151	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-152	ND		21	0.87	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-153	**11**	**J**	42	0.80	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-154	ND		21	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-155	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-156	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-157	ND		42	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-158	ND		21	0.83	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-159	ND		21	0.93	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-160	**14**	**J q**	21	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-161	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-162	ND		42	1.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-163	**14**	**J q**	62	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-164	ND		21	1.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-165	ND		21	0.92	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-166	ND		83	0.98	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-167	ND		42	0.91	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-168	**11**	**J**	42	0.80	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-169	ND		21	0.99	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-170	ND		42	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-171	ND		42	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-172	ND		21	2.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-173	ND		42	2.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-174	ND		21	2.3	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-175	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-176	ND		21	0.88	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-177	ND		21	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-178	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-179	ND		21	0.75	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-180	**11**	**J q**	42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-181	ND		21	1.9	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-182	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-183	ND		21	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-184	ND		21	0.79	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-185	ND		42	2.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-186	ND		21	0.71	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-187	ND		21	0.93	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-188	ND		21	0.93	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-189	ND		21	1.4	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-190	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-191	ND		42	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-192	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-193	**11**	**J q**	42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-194	ND		42	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-195	ND		21	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-196	ND		21	1.6	pg/L		01/10/24 07:52	01/19/24 19:07	1

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-002 - R6South-20231214
Date Collected: 12/14/23 14:45
Date Received: 12/19/23 09:30

Lab Sample ID: 320-108192-2
Matrix: Water

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		21	0.97	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-198	ND		42	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-199	ND		42	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-200	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-201	ND		21	1.2	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-202	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-203	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-204	ND		21	1.1	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-205	ND		21	1.5	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-206	ND		42	2.0	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-207	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-208	ND		21	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1
PCB-209	ND		42	1.7	pg/L		01/10/24 07:52	01/19/24 19:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*62*		*15 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-3L	*60*		*15 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-4L	*50*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-15L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-19L	*55*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-37L	*59*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-54L	*32*	*q*	*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-77L	*58*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-81L	*59*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-104L	*33*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-105L	*63*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-114L	*62*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-118L	*61*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-123L	*63*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-126L	*65*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-155L	*54*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-156L	*94*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-156L/157L	*94*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-157L	*94*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-167L	*93*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-169L	*94*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-188L	*27*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-189L	*56*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-202L	*49*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-205L	*69*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-206L	*64*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-208L	*58*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-209L	*53*		*25 - 150*	*01/10/24 07:52*	*01/19/24 19:07*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*88*		*30 - 135*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-111L	*96*		*30 - 135*	*01/10/24 07:52*	*01/19/24 19:07*	*1*
PCB-178L	*70*		*30 - 135*	*01/10/24 07:52*	*01/19/24 19:07*	*1*

Surrogate Summary

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	PCB28L (30-135)	PCB111L (30-135)	PCB178L (30-135)
320-108192-1	2312898-001 - R6 North-202312	79	86	67
320-108192-2	2312898-002 - R6South-20231214	88	96	70
MB 320-732336/1-A	Method Blank	83	105	95

Surrogate Legend

PCB28L = PCB-28L
PCB111L = PCB-111L
PCB178L = PCB-178L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	PCB28L (40-125)	PCB111L (40-125)	PCB178L (40-125)
LCS 320-732336/2-A	Lab Control Sample	75	94	83
LCSD 320-732336/3-A	Lab Control Sample Dup	87	104	90

Surrogate Legend

PCB28L = PCB-28L
PCB111L = PCB-111L
PCB178L = PCB-178L

Isotope Dilution Summary

Client: Eurofins Environment Testing South Central LLC
Job ID: 320-108192-1
Project/Site: 2312898

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB1L (15-150)	PCB3L (15-150)	PCB4L (25-150)	PCB15L (25-150)	PCB19L (25-150)	PCB37L (25-150)	PCB54L (25-150)	PCB77L (25-150)
320-108192-1	2312898-001 - R6 North-202312	51	51	42	48	45	55	29	55
320-108192-2	2312898-002 - R6South-20231214	62	60	50	55	55	59	32 q	58
MB 320-732336/1-A	Method Blank	76	77	78	76	73	68	54	81

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB81L (25-150)	PCB104L (25-150)	PCB105L (25-150)	PCB114L (25-150)	PCB118L (25-150)	PCB123L (25-150)	PCB126L (25-150)	PCB155L (25-150)
320-108192-1	2312898-001 - R6 North-202312	53	31	55	56	55	57	56	50
320-108192-2	2312898-002 - R6South-20231214	59	33	63	62	61	63	65	54
MB 320-732336/1-A	Method Blank	79	52	89	84	85	85	95	54

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB156L (25-150)	156157L (25-150)	PCB157L (25-150)	PCB167L (25-150)	PCB169L (25-150)	PCB188L (25-150)	PCB189L (25-150)	PCB202L (25-150)
320-108192-1	2312898-001 - R6 North-202312	99	99	99	98	103	24 *5-	54	43
320-108192-2	2312898-002 - R6South-20231214	94	94	94	93	94	27	56	49
MB 320-732336/1-A	Method Blank	91	91	91	83	98	41	65	52

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB205L (25-150)	PCB206L (25-150)	PCB208L (25-150)	PCB209L (25-150)				
320-108192-1	2312898-001 - R6 North-202312	66	60	54	46				
320-108192-2	2312898-002 - R6South-20231214	69	64	58	53				
MB 320-732336/1-A	Method Blank	85	92	71	98				

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
PCB114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
156157L = PCB-156L/157L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB188L = PCB-188L
PCB189L = PCB-189L

Isotope Dilution Summary

Client: Eurofins Environment Testing South Central LLC
Job ID: 320-108192-1
Project/Site: 2312898

PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB1L	PCB3L	PCB4L	PCB15L	PCB19L	PCB37L	PCB54L	PCB77L
Lab Sample ID	Client Sample ID	(15-140)	(15-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-732336/2-A	Lab Control Sample	66	67	69	66	66	65	52	77
LCSD 320-732336/3-A	Lab Control Sample Dup	76	78	79	77	75	70	59	83

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB81L	PCB104L	PCB105L	PCB114L	PCB118L	PCB123L	PCB126L	PCB155L
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-732336/2-A	Lab Control Sample	75	51	84	81	77	79	91	51
LCSD 320-732336/3-A	Lab Control Sample Dup	82	56	92	88	86	86	96	52

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB156L	156157L	PCB157L	PCB167L	PCB169L	PCB188L	PCB189L	PCB202L
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-732336/2-A	Lab Control Sample	81	81	81	74	91	41	66	51
LCSD 320-732336/3-A	Lab Control Sample Dup	85	85	85	76	93	44	66	53

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB205L	PCB206L	PCB208L	PCB209L				
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)				
LCS 320-732336/2-A	Lab Control Sample	85	94	72	103				
LCSD 320-732336/3-A	Lab Control Sample Dup	85	96	72	104				

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
PCB114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
156157L = PCB-156L/157L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L

Isotope Dilution Summary

Client: Eurofins Environment Testing South Central LLC
Job ID: 320-108192-1
Project/Site: 2312898

PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		100	0.79	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-2	ND		100	0.84	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-3	ND		150	0.79	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-4	ND		100	12	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-5	ND		20	6.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-6	ND		20	5.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-7	ND		40	5.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-8	ND		40	4.9	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-9	ND		40	6.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-10	ND		40	7.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-11	ND		150	6.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-12	ND		200	6.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-13	ND		200	6.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-14	ND		40	6.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-15	ND		100	4.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-16	ND		40	1.9	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-17	ND		40	1.9	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-18	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-19	ND		40	2.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-20	ND		80	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-21	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-22	ND		20	1.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-23	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-24	ND		20	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-25	ND		20	0.89	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-26	ND		80	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-27	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-28	ND		80	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-29	ND		80	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-30	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-31	ND		100	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-32	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-33	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-34	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-35	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-36	ND		20	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-37	ND		20	1.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-38	ND		20	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-39	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-40	ND		40	0.80	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-41	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-42	ND		40	0.88	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-43	ND		20	0.91	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-44	ND		120	0.81	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-45	ND		40	0.94	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-46	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-47	ND		120	0.81	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-48	ND		20	0.91	pg/L		01/10/24 07:52	01/14/24 23:52	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-49	ND		40	0.74	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-50	ND		40	0.91	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-51	ND		40	0.94	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-52	ND		100	0.84	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-53	ND		40	0.91	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-54	ND		40	0.72	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-55	ND		40	0.95	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-56	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-57	ND		20	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-58	ND		20	0.99	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-59	ND		60	0.69	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-60	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-61	ND		160	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-62	ND		60	0.69	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-63	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-64	ND		40	0.66	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-65	ND		120	0.81	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-66	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-67	ND		20	0.95	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-68	ND		40	1.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-69	ND		40	0.74	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-70	ND		160	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-71	ND		40	0.80	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-72	ND		20	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-73	ND		20	0.63	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-74	ND		160	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-75	ND		60	0.69	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-76	ND		160	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-77	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-78	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-79	ND		40	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-80	ND		40	0.96	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-81	ND		20	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-82	ND		20	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-83	ND		20	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-84	ND		40	2.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-85	ND		60	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-86	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-87	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-88	ND		40	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-89	ND		40	2.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-90	ND		120	1.5	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-91	ND		40	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-92	ND		40	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-93	ND		80	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-94	ND		40	2.0	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-95	ND		100	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-96	ND		20	0.81	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-97	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-98	ND		40	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-99	ND		40	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-100	ND		80	1.7	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-101	ND		120	1.5	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-102	ND		40	1.8	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-103	ND		40	1.6	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-104	ND		40	0.97	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-105	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-106	ND		40	1.5	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-107	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-108	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-109	ND		20	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-110	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-111	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-112	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-113	ND		120	1.5	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-114	ND		40	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-115	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-116	ND		60	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-117	ND		60	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-118	ND		40	1.2	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-119	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-120	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-121	ND		20	1.1	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-122	ND		40	1.6	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-123	ND		40	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-124	ND		40	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-125	ND		120	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-126	ND		20	1.3	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-127	ND		20	1.4	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-128	ND		80	0.51	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-129	ND		60	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-130	ND		20	0.69	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-131	ND		20	0.64	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-132	ND		20	0.66	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-133	ND		20	0.62	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-134	ND		40	0.62	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-135	ND		40	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-136	ND		20	0.42	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-137	ND		20	0.50	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-138	ND		60	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-139	ND		40	0.56	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-140	ND		40	0.56	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-141	ND		20	0.66	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-142	ND		20	0.67	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-143	ND		40	0.62	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-144	ND		20	0.53	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-145	ND		20	0.43	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-146	ND		20	0.48	pg/L		01/10/24 07:52	01/14/24 23:52	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-147	ND		40	0.54	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-148	ND		20	0.55	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-149	ND		40	0.54	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-150	ND		20	0.41	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-151	ND		40	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-152	ND		20	0.43	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-153	ND		40	0.44	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-154	ND		20	0.51	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-155	ND		20	0.55	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-156	ND		40	0.37	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-157	ND		40	0.37	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-158	ND		20	0.39	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-159	ND		20	0.30	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-160	ND		20	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-161	ND		20	0.49	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-162	ND		40	0.33	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-163	ND		60	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-164	ND		20	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-165	ND		20	0.47	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-166	ND		80	0.51	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-167	ND		40	0.32	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-168	ND		40	0.44	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-169	ND		20	0.34	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-170	ND		40	0.84	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-171	ND		40	0.78	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-172	ND		20	0.84	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-173	ND		40	0.78	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-174	ND		20	0.85	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-175	ND		20	0.58	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-176	ND		20	0.45	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-177	ND		20	0.74	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-178	ND		20	0.62	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-179	ND		20	0.40	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-180	ND		40	0.63	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-181	ND		20	0.74	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-182	ND		20	0.59	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-183	ND		20	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-184	ND		20	0.41	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-185	ND		40	0.83	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-186	ND		20	0.37	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-187	ND		20	0.49	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-188	ND		20	0.45	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-189	ND		20	0.50	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-190	ND		20	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-191	ND		40	0.57	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-192	ND		20	0.54	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-193	ND		40	0.63	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-194	ND		40	0.49	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-195	ND		20	0.49	pg/L		01/10/24 07:52	01/14/24 23:52	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-196	ND		20	0.52	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-197	ND		20	0.31	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-198	ND		40	0.47	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-199	ND		40	0.47	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-200	ND		20	0.50	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-201	ND		20	0.40	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-202	ND		20	0.38	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-203	ND		20	0.46	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-204	ND		20	0.38	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-205	ND		20	0.44	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-206	ND		40	0.83	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-207	ND		20	0.66	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-208	ND		20	0.72	pg/L		01/10/24 07:52	01/14/24 23:52	1
PCB-209	ND		40	0.16	pg/L		01/10/24 07:52	01/14/24 23:52	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*76*		*15 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-3L	*77*		*15 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-4L	*78*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-15L	*76*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-19L	*73*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-37L	*68*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-54L	*54*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-77L	*81*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-81L	*79*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-104L	*52*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-105L	*89*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-114L	*84*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-118L	*85*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-123L	*85*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-126L	*95*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-155L	*54*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-156L	*91*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-156L/157L	*91*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-157L	*91*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-167L	*83*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-169L	*98*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-188L	*41*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-189L	*65*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-202L	*52*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-205L	*85*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-206L	*92*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-208L	*71*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-209L	*98*		*25 - 150*	*01/10/24 07:52*	*01/14/24 23:52*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*83*		*30 - 135*	*01/10/24 07:52*	*01/14/24 23:52*	*1*
PCB-111L	*105*		*30 - 135*	*01/10/24 07:52*	*01/14/24 23:52*	*1*

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-732336/1-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 732336

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-178L	95		30 - 135	01/10/24 07:52	01/14/24 23:52	1

Lab Sample ID: LCS 320-732336/2-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1	2000	2030		pg/L		102	50 - 150
PCB-3	2000	2000		pg/L		100	50 - 150
PCB-4	2000	2190		pg/L		110	50 - 150
PCB-15	2000	1960		pg/L		98	50 - 150
PCB-19	2000	2230		pg/L		112	50 - 150
PCB-37	2000	2090		pg/L		105	50 - 150
PCB-54	2000	2190	q	pg/L		109	50 - 150
PCB-77	2000	2340		pg/L		117	50 - 150
PCB-81	2000	2600		pg/L		130	50 - 150
PCB-104	2000	2920		pg/L		146	50 - 150
PCB-105	2000	2360		pg/L		118	50 - 150
PCB-114	2000	2520		pg/L		126	50 - 150
PCB-118	2000	2390		pg/L		119	50 - 150
PCB-123	2000	2460		pg/L		123	50 - 150
PCB-126	2000	2540		pg/L		127	50 - 150
PCB-155	2000	2840		pg/L		142	50 - 150
PCB-156	4000	4670		pg/L		117	50 - 150
PCB-157	4000	4670		pg/L		117	50 - 150
PCB-167	2000	2400		pg/L		120	50 - 150
PCB-169	2000	2290		pg/L		114	50 - 150
PCB-188	2000	2380		pg/L		119	50 - 150
PCB-189	2000	2120		pg/L		106	50 - 150
PCB-202	2000	2440		pg/L		122	50 - 150
PCB-205	2000	2180		pg/L		109	50 - 150
PCB-206	2000	1990		pg/L		100	50 - 150
PCB-208	2000	2220		pg/L		111	50 - 150
PCB-209	2000	2180		pg/L		109	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	66		15 - 140
PCB-3L	67		15 - 140
PCB-4L	69		30 - 140
PCB-15L	66		30 - 140
PCB-19L	66		30 - 140
PCB-37L	65		30 - 140
PCB-54L	52		30 - 140
PCB-77L	77		30 - 140
PCB-81L	75		30 - 140
PCB-104L	51		30 - 140
PCB-105L	84		30 - 140
PCB-114L	81		30 - 140

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-732336/2-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 732336

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-118L	77		30 - 140
PCB-123L	79		30 - 140
PCB-126L	91		30 - 140
PCB-155L	51		30 - 140
PCB-156L	81		30 - 140
PCB-156L/157L	81		30 - 140
PCB-157L	81		30 - 140
PCB-167L	74		30 - 140
PCB-169L	91		30 - 140
PCB-188L	41		30 - 140
PCB-189L	66		30 - 140
PCB-202L	51		30 - 140
PCB-205L	85		30 - 140
PCB-206L	94		30 - 140
PCB-208L	72		30 - 140
PCB-209L	103		30 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	75		40 - 125
PCB-111L	94		40 - 125
PCB-178L	83		40 - 125

Lab Sample ID: LCSD 320-732336/3-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 732336

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1			2000	1970		pg/L		99	50 - 150	3	50
PCB-3			2000	1920		pg/L		96	50 - 150	4	50
PCB-4			2000	2190		pg/L		110	50 - 150	0	50
PCB-15			2000	1940		pg/L		97	50 - 150	1	50
PCB-19			2000	2230		pg/L		112	50 - 150	0	50
PCB-37			2000	2100		pg/L		105	50 - 150	0	50
PCB-54			2000	2300		pg/L		115	50 - 150	5	50
PCB-77			2000	2290		pg/L		114	50 - 150	2	50
PCB-81			2000	2540		pg/L		127	50 - 150	2	50
PCB-104			2000	2900		pg/L		145	50 - 150	1	50
PCB-105			2000	2340		pg/L		117	50 - 150	1	50
PCB-114			2000	2540		pg/L		127	50 - 150	1	50
PCB-118			2000	2310		pg/L		115	50 - 150	3	50
PCB-123			2000	2420		pg/L		121	50 - 150	2	50
PCB-126			2000	2540		pg/L		127	50 - 150	0	50
PCB-155			2000	2830		pg/L		141	50 - 150	0	50
PCB-156			4000	4550		pg/L		114	50 - 150	3	50
PCB-157			4000	4550		pg/L		114	50 - 150	3	50
PCB-167			2000	2400		pg/L		120	50 - 150	0	50
PCB-169			2000	2250		pg/L		112	50 - 150	2	50
PCB-188			2000	2340		pg/L		117	50 - 150	1	50

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-732336/3-A
Matrix: Water
Analysis Batch: 733676

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 732336

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-189			2000	2100		pg/L		105	50 - 150	1	50
PCB-202			2000	2450		pg/L		123	50 - 150	0	50
PCB-205			2000	2150		pg/L		108	50 - 150	1	50
PCB-206			2000	1930		pg/L		96	50 - 150	3	50
PCB-208			2000	2210		pg/L		110	50 - 150	0	50
PCB-209			2000	2140		pg/L		107	50 - 150	2	50

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
PCB-1L	*76*		*15 - 140*
PCB-3L	*78*		*15 - 140*
PCB-4L	*79*		*30 - 140*
PCB-15L	*77*		*30 - 140*
PCB-19L	*75*		*30 - 140*
PCB-37L	*70*		*30 - 140*
PCB-54L	*59*		*30 - 140*
PCB-77L	*83*		*30 - 140*
PCB-81L	*82*		*30 - 140*
PCB-104L	*56*		*30 - 140*
PCB-105L	*92*		*30 - 140*
PCB-114L	*88*		*30 - 140*
PCB-118L	*86*		*30 - 140*
PCB-123L	*86*		*30 - 140*
PCB-126L	*96*		*30 - 140*
PCB-155L	*52*		*30 - 140*
PCB-156L	*85*		*30 - 140*
PCB-156L/157L	*85*		*30 - 140*
PCB-157L	*85*		*30 - 140*
PCB-167L	*76*		*30 - 140*
PCB-169L	*93*		*30 - 140*
PCB-188L	*44*		*30 - 140*
PCB-189L	*66*		*30 - 140*
PCB-202L	*53*		*30 - 140*
PCB-205L	*85*		*30 - 140*
PCB-206L	*96*		*30 - 140*
PCB-208L	*72*		*30 - 140*
PCB-209L	*104*		*30 - 140*

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
PCB-28L	*87*		*40 - 125*
PCB-111L	*104*		*40 - 125*
PCB-178L	*90*		*40 - 125*

Specialty Organics

Prep Batch: 732336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-108192-1	2312898-001 - R6 North-20231213	Total/NA	Water	HRMS-Sep	
320-108192-2	2312898-002 - R6South-20231214	Total/NA	Water	HRMS-Sep	
MB 320-732336/1-A	Method Blank	Total/NA	Water	HRMS-Sep	
LCS 320-732336/2-A	Lab Control Sample	Total/NA	Water	HRMS-Sep	
LCSD 320-732336/3-A	Lab Control Sample Dup	Total/NA	Water	HRMS-Sep	

Analysis Batch: 733676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-732336/1-A	Method Blank	Total/NA	Water	1668A	732336
LCS 320-732336/2-A	Lab Control Sample	Total/NA	Water	1668A	732336
LCSD 320-732336/3-A	Lab Control Sample Dup	Total/NA	Water	1668A	732336

Analysis Batch: 734754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-108192-1	2312898-001 - R6 North-20231213	Total/NA	Water	1668A	732336
320-108192-2	2312898-002 - R6South-20231214	Total/NA	Water	1668A	732336

Lab Chronicle

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Client Sample ID: 2312898-001 - R6 North-20231213

Lab Sample ID: 320-108192-1

Date Collected: 12/13/23 12:00
Matrix: Water
Date Received: 12/19/23 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	HRMS-Sep			1017.7 mL	20.0 uL	732336	01/10/24 07:52	GSH	EET SAC
Total/NA	Analysis	1668A		1	1 mL	1 mL	734754	01/19/24 18:05	JBC	EET SAC

Client Sample ID: 2312898-002 - R6South-20231214

Lab Sample ID: 320-108192-2

Date Collected: 12/14/23 14:45
Matrix: Water
Date Received: 12/19/23 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	HRMS-Sep			961.3 mL	20.0 uL	732336	01/10/24 07:52	GSH	EET SAC
Total/NA	Analysis	1668A		1	1 mL	1 mL	734754	01/19/24 19:07	JBC	EET SAC

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Eurofins Environment Testing South Central LLC
Job ID: 320-108192-1
Project/Site: 2312898

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-27
ANAB	Dept. of Energy	L2468.01	01-20-27
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-24
Arkansas DEQ	State	88-0691	05-18-24
California	State	2897	01-22-24
Colorado	State	CA00044	08-31-24
Florida	NELAP	E87570	06-30-24
Georgia	State	4040	01-29-24
Hawaii	State	<cert No.>	01-29-24
Illinois	NELAP	200060	03-17-24
Kansas	NELAP	E-10375	10-31-24
Louisiana (All)	NELAP	01944	06-30-24
Maine	State	CA00004	04-14-24
Michigan	State	9947	01-31-24
Nevada	State	CA00044	07-31-24
New Hampshire	NELAP	2997	04-18-24
New Jersey	NELAP	CA005	06-30-24
New York	NELAP	11666	04-01-24
Ohio	State	41252	01-29-24
Oregon	NELAP	4040	01-29-24
Texas	NELAP	T104704399-23-17	05-31-24
US Fish & Wildlife	US Federal Programs	58448	04-30-24
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442023-16	02-29-24
Virginia	NELAP	460278	03-14-24
Washington	State	C581	05-05-24
West Virginia (DW)	State	9930C	01-31-25
Wisconsin	State	998204680	08-31-24
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Method	Method Description	Protocol	Laboratory
1668A	Chlorinated Biphenyl Congeners (HRGC/HRMS)	EPA	EET SAC
HRMS-Sep	Separatory Funnel (Liquid-Liquid) Extraction	EPA	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Eurofins Environment Testing South Central LLC
Project/Site: 2312898

Job ID: 320-108192-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-108192-1	2312898-001 - R6 North-20231213	Water	12/13/23 12:00	12/19/23 09:30
320-108192-2	2312898-002 - R6South-20231214	Water	12/14/23 14:45	12/19/23 09:30

eurofins | Environment Testing

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL. 505-345-3975
FAX 505-345-4107
Website www.hallenvironmental.com

SUB CONTRATOR: **Eurofins Sacramento** COMPANY		PHONE. **(916) 373-5600**	FAX.
ADDRESS **880 Riverside Parkway**		ACCOUNT #:	EMAIL.
CITY STATE, ZIP: **West Sacramento, CA 95605**			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2312898-001L	R6 North-20231213	1LAMGU	Aqueous	12/13/2023 12 00 00 PM	1	PCBS 1668 -Pease Apply ICO Pricing-
2	2312898-002L	R6South-20231214	1LAMGU	Aqueous	12/14/2023 2.45 00 PM	1	PCBS 1668 -Pease Apply ICO Pricing-

320-108192 Chain of Custody

SPECIAL INSTRUCTIONS / COMMENTS:

Include the LAB ID and CLIENT SAMPLE ID on final reports. Email results to Hall.Lab@et.eurofinsus.com. For Questions email Hall.samplecontrol@et.eurofinsus.com. Please return all coolers and blue ice. Thank you.

0.8°C

Relinquished By:	Date: 12/15/2023	Time: 8:48 AM	Received By: Alexis Hemphill	Date: 12/19/23	Time: 930
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By	Date:	Time:	Received By	Date:	Time:

TAT: Standard ☑ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments. _____

eurofins | Environment Testing

Sacramento Sample Receiving Notes (SSRN)

Loc 320
108192

Tracking # 7745 2986 7909

Job _____ _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other_____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations
File in the job folder with the COC.

Therm. ID: L-09 Corr. Factor: (+ / -) NA °C

Ice_____ Wet_____ Gel X Other _____

Cooler Custody Seal NA

Cooler ID. NA

Temp Observed: 0.8 °C Corrected: 0.8 °C
From Temp Blank ☐ Sample ☒

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials DNH Date 12/19/23

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☑	☐	☐
Sample custody seal?	☐	☑	☐
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☑	☐
Is the Field Sampler's name on COC?	☐	☑	☐
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials GP Date 12-19-23

Notes:_____

Trizma Lot #(s): _____

Ammonium
Acetate Lot #(s). _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☑	☐	☐
Log Release checked in TALS?	☑	☐	☐

Initials GP Date 12-19-23
W4C

Login Sample Receipt Checklist

Client: Eurofins Environment Testing South Central LLC

Job Number: 320-108192-1

Login Number: 108192
List Number: 1
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79435**	SampType: **MBLK**	TestCode: **EPA Method 1664B**							
Client ID: **PBW**	Batch ID: **79435**	RunNo: **101935**							
Prep Date: **12/18/2023**	Analysis Date: **12/19/2023**	SeqNo: **3760234**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	ND	10.0								

Sample ID: **LCS-79435**	SampType: **LCS**	TestCode: **EPA Method 1664B**							
Client ID: **LCSW**	Batch ID: **79435**	RunNo: **101935**							
Prep Date: **12/18/2023**	Analysis Date: **12/19/2023**	SeqNo: **3760235**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	37.6	10.0	40.00	0	94.0	78	114			

Sample ID: **LCSD-79435**	SampType: **LCSD**	TestCode: **EPA Method 1664B**							
Client ID: **LCSS02**	Batch ID: **79435**	RunNo: **101935**							
Prep Date: **12/18/2023**	Analysis Date: **12/19/2023**	SeqNo: **3760236**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Hexane Extractable Material	36.2	10.0	40.00	0	90.5	78	114	3.79	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79508**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Metals**
Client ID: **PBW**	Batch ID: **79508**	RunNo: **102210**
Prep Date: **12/19/2023**	Analysis Date: **1/2/2024**	SeqNo: **3773160** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								

Sample ID: **LCSLL-79508**	SampType: **LCSLL**	TestCode: **EPA Method 200.7: Metals**
Client ID: **BatchQC**	Batch ID: **79508**	RunNo: **102210**
Prep Date: **12/19/2023**	Analysis Date: **1/2/2024**	SeqNo: **3773161** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	0.55	1.0	0.5000	0	110	50	150			J
Magnesium	0.53	1.0	0.5000	0	107	50	150			J

Sample ID: **LCS-79508**	SampType: **LCS**	TestCode: **EPA Method 200.7: Metals**
Client ID: **LCSW**	Batch ID: **79508**	RunNo: **102210**
Prep Date: **12/19/2023**	Analysis Date: **1/2/2024**	SeqNo: **3773162** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	54	1.0	50.00	0	109	85	115			
Magnesium	52	1.0	50.00	0	104	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **PBW**	Batch ID: **B101952**	RunNo: **101952**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3760683** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	ND	0.00050								
Lead	ND	0.00050								

Sample ID: **LCSLL**	SampType: **LCSLL**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **B101952**	RunNo: **101952**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3760684** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.00051	0.00050	0.0005000	0	103	50	150			

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **B101952**	RunNo: **101952**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3760686** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.024	0.00050	0.02500	0	94.4	85	115			
Lead	0.012	0.00050	0.01250	0	97.8	85	115			

Sample ID: **LCSLLB**	SampType: **LCSLL**	TestCode: **EPA 200.8: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **B101952**	RunNo: **101952**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3760688** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Copper	0.00052	0.00050	0.0005000	0	104	50	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R101967**	RunNo: **101967**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3762466** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R101967**	RunNo: **101967**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3762467** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	100	90	110			

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R101967**	RunNo: **101967**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3762506** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R101967**	RunNo: **101967**
Prep Date:	Analysis Date: **12/19/2023**	SeqNo: **3762508** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.4	0.20	3.500	0	97.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79411**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **79411**	RunNo: **101973**							
Prep Date: **12/15/2023**	Analysis Date: **12/20/2023**	SeqNo: **3762618**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.00								

Sample ID: **LCS-79411**	SampType: **LCS**	TestCode: **SM5210B: BOD**							
Client ID: **LCSW**	Batch ID: **79411**	RunNo: **101973**							
Prep Date: **12/15/2023**	Analysis Date: **12/20/2023**	SeqNo: **3762619**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	141	2.00	198.0	0	71.2	84.6	115.4			S

Sample ID: **2312898-002BDUP**	SampType: **DUP**	TestCode: **SM5210B: BOD**							
Client ID: **R6South-20231214**	Batch ID: **79411**	RunNo: **101973**							
Prep Date: **12/15/2023**	Analysis Date: **12/20/2023**	SeqNo: **3762622**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	letion <2.0	2.00						0	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79689**	SampType: **MBLK**	TestCode: **SM5220D: COD**							
Client ID: **PBW**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773398**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	ND	50.0								

Sample ID: **LCS-79689**	SampType: **LCS**	TestCode: **SM5220D: COD**							
Client ID: **LCSW**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773399**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	487	50.0	500.0	0	97.4	90	110			

Sample ID: **LCSLL-79689**	SampType: **LCSLL**	TestCode: **SM5220D: COD**							
Client ID: **BatchQC**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773400**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	49.8	50.0	50.00	0	99.5	50	150			J

Sample ID: **2312898-001HMS**	SampType: **MS**	TestCode: **SM5220D: COD**							
Client ID: **R6 North-20231213**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773411**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	495	50.0	500.0	110.3	77.0	90	110			S

Sample ID: **2312898-001HMSD**	SampType: **MSD**	TestCode: **SM5220D: COD**							
Client ID: **R6 North-20231213**	Batch ID: **79689**	RunNo: **102200**							
Prep Date: **1/2/2024**	Analysis Date: **1/3/2024**	SeqNo: **3773412**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chemical Oxygen Demand	491	50.0	500.0	110.3	76.2	90	110	0.877	20	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79402**	SampType: **MBLK**	TestCode: **SM 9223B Fecal Indicator: E. coli MPN**
Client ID: **PBW**	Batch ID: **79402**	RunNo: **101861**
Prep Date: **12/14/2023**	Analysis Date: **12/15/2023**	SeqNo: **3755840** Units: **MPN/100mL**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
E. Coli	<1	1.000								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB**	SampType: **MBLK**	TestCode: **SM 4500 NH3: Ammonia**
Client ID: **PBW**	Batch ID: **R102011**	RunNo: **102011**
Prep Date:	Analysis Date: **12/21/2023**	SeqNo: **3764147** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	ND	1.0								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **SM 4500 NH3: Ammonia**
Client ID: **LCSW**	Batch ID: **R102011**	RunNo: **102011**
Prep Date:	Analysis Date: **12/21/2023**	SeqNo: **3764148** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Ammonia	10	1.0	10.00	0	104	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79761**	SampType: **mblk**	TestCode: **EPA Method 365.1: Total Phosphorous**
Client ID: **PBW**	Batch ID: **79761**	RunNo: **102279**
Prep Date: **1/6/2024**	Analysis Date: **1/6/2024**	SeqNo: **3776277** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	ND	0.050								

Sample ID: **LCS-79761**	SampType: **LCS**	TestCode: **EPA Method 365.1: Total Phosphorous**
Client ID: **LCSW**	Batch ID: **79761**	RunNo: **102279**
Prep Date: **1/6/2024**	Analysis Date: **1/6/2024**	SeqNo: **3776278** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phosphorus, Total (As P)	0.25	0.050	0.2500	0	100	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79518**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **79518**	RunNo: **102025**
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764700** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50.0								

Sample ID: **LCS-79518**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **79518**	RunNo: **102025**
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764701** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	995	50.0	1000	0	99.5	80	120			

Sample ID: **2312898-001DDUP**	SampType: **DUP**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **R6 North-20231213**	Batch ID: **79518**	RunNo: **102025**
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764719** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	202	50.0						0.985	10	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79864**	SampType: **MBLK**	TestCode: **EPA 351.2: TKN**							
Client ID: **PBW**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787319**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	0.50								

Sample ID: **LCSLL-79864**	SampType: **LCSLL**	TestCode: **EPA 351.2: TKN**							
Client ID: **BatchQC**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787320**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	0.28	0	0.5000	0	55.1	50	150			

Sample ID: **LCS-79864**	SampType: **LCS**	TestCode: **EPA 351.2: TKN**							
Client ID: **LCSW**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787321**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	9.5	0.50	10.00	0	95.2	90	110			

Sample ID: **2312898-001DMS**	SampType: **MS**	TestCode: **EPA 351.2: TKN**							
Client ID: **R6 North-20231213**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787323**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	10	0.50	10.00	0	102	90	110			H

Sample ID: **2312898-001DMSD**	SampType: **MSD**	TestCode: **EPA 351.2: TKN**							
Client ID: **R6 North-20231213**	Batch ID: **79864**	RunNo: **102531**							
Prep Date: **1/11/2024**	Analysis Date: **1/13/2024**	SeqNo: **3787324**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	11	0.50	10.00	0	106	90	110	3.87	20	H

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312898**

05-Mar-24

Client: AMAFCA

Project: CMC FY24 Dry

Sample ID: **MB-79522**	SampType: **MBLK**	TestCode: **SM 2540D: TSS**							
Client ID: **PBW**	Batch ID: **79522**	RunNo: **102014**							
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764409**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	ND	4.0								

Sample ID: **LCS-79522**	SampType: **LCS**	TestCode: **SM 2540D: TSS**							
Client ID: **LCSW**	Batch ID: **79522**	RunNo: **102014**							
Prep Date: **12/20/2023**	Analysis Date: **12/21/2023**	SeqNo: **3764410**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	97	4.0	91.90	0	106	83.89	119.7			

Sample ID: **MB-79546**	SampType: **MBLK**	TestCode: **SM 2540D: TSS**							
Client ID: **PBW**	Batch ID: **79546**	RunNo: **102038**							
Prep Date: **12/21/2023**	Analysis Date: **12/22/2023**	SeqNo: **3765815**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	ND	4.0								

Sample ID: **LCS-79546**	SampType: **LCS**	TestCode: **SM 2540D: TSS**							
Client ID: **LCSW**	Batch ID: **79546**	RunNo: **102038**							
Prep Date: **12/21/2023**	Analysis Date: **12/22/2023**	SeqNo: **3765816**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Suspended Solids	87	4.0	91.90	0	94.7	83.89	119.7			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: AMAFCA Work Order Number: 2312898 RcptNo: 1

Received By: Tracy Casarrubias 12/14/2023 4:00:00 PM

Completed By: Cheyenne Cason 12/14/2023 4:12:03 PM

Reviewed By: TMC 12/14/23 16:47 12/15/23

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? ~~Yes ☑~~ No ☐ NV 12/19/23
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: 14 (<2 or >12 unless noted)
Adjusted? NO
Checked by: TMC 12/15/23

BOD/coliform : 12/14/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Not Present	Morty		
2	7.7	Good	Not Present	Morty	Samples collected the same day & chilled. NV 12/19/23	

Chain-of-Custody Record

Client: AMAFCA

Mailing Address:

Phone #:

email or Fax#: pchavez@amafca.org

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: CMC FY24 Dry

Project #:

Project Manager: Patrick Chavez

Sampler: DBS4-C. Johnson

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp(including CF): See Remarks(°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2312898	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	ecoli - environmental	See attached list
12-13-23	1200	AQ	RG North-20231213			001											X	X
12-14-23	1445		RG South-20231214			002											X	X
			~~Trip Blank~~ per sample bottle															

tmc 12/19/23 JM 12/19/23 JM 12/19/23

Date:	Time:	Relinquished by:	Received by:	Via: CDO	Date	Time
12/19/23	16:01				12/19/23	16:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
3.8 ± 0 = 3.8°c
7.7 ± 0 = 7.7°c
morty

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Collaborative Monitoring Cooperative - Analyses List
Attach to Chain of Custody

Analyte (Bold Indicates WQS)	CAS #	Fraction	Method #	MDL (µg/L)
Hardness (Ca + Mg)	NA	Total	200.7	2.4
Lead	7439-92-1	Dissolved	200.8	0.09
Copper	7440-50-8	Dissolved	200.8	1.06
Ammonia + organic nitrogen	7664-41-7	Total	350.1	31.32
Total Kjehldal Nitrogen	17778-88-0	Total	351.2	58.78
Nitrate + Nitrite	14797-55-8	Total	353.2	10.17
Polychlorinated biphenyls (PCBs)	1336-36-3	Total	1668	0.014
Tetrahydrofuran (THF)	109-99-9	Total	8260C	7.9
bis(2-Ethylhexyl)phthalate	117-81-7	Total	8270D	0.2
Dibenzofuran	132-64-9	Total	8270D	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	Total	8270D	0.2
Benzo(b)fluoranthene	205-99-2	Total	8270D	0.1
Benzo(k)fluoranthene	207-08-9	Total	8270D	0.1
Chrysene	218-01-9	Total	8270D	0.2
Benzo(a)pyrene	50-32-8	Total	8270D	0.3
Dibenzo(a,h)anthracene	53-70-3	Total	8270D	0.3
Benzo(a)anthracene	56-55-3	Total	8270D	0.2
Dieldrin	60-57-1	Total	8270D	0.1
Pentachlorophenol	87-86-5	Total	8270D	0.2
Benzidine	92-87-5	Total	8270D	0.1
Chemical Oxygen Demand	E1641638[2]	Total	HACH	5100
Gross alpha (adjusted)	NA	Total	Method 900	0.1 pCi/L
Total Dissolved Solids	E1642222[2]	Total	SM 2540C	60.4
Total Suspended Solids	NA	Total	SM 2540D	3450
Biological Oxygen Demand	N/A	Total	Standard Methods	930
Oil and Grease		Total	1664A	5000
Ecoli			SM 9223B	
pH			SM 4500	
Phosphorus		Dissolved	365.1	100
Phosphorus		Total	365.1	100
Chromium IV		Total	3500Cr C-2011	100

Appendix F - Minimum Quantification Levels (MQL's)

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE and CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thalllium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury (*)	0.0005 0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Clorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		
ACID COMPOUNDS			
2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Chavez
Albuquerque Metropolitan Arroyo Flood Control Authority
2600 Prospect Ave NE
Albuquerque, New Mexico 87107

Generated 7/1/2024 11:06:42 AM

JOB DESCRIPTION

CMC

JOB NUMBER

885-6986-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

myEOL

Eurofins Albuquerque

Job Notes

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 Environment Testing South Central, LLC Project Manager.

Authorization

Generated
7/1/2024 11:06:42 AM

Authorized for release by
Erin Munoz, Project Manager
Erin.Munoz@et.eurofinsus.com
(505)345-3975

Table of Contents

Definitions/Glossary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Glossary

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

Job ID: 885-6986-1 **Eurofins Albuquerque**

Job Narrative
885-6986-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/26/2024 4:49 PM. 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 26.3°C.

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

06/26/2024: Rio Grande North and Rio Grande at Alameda E. coli tested.

Field Parameters:
- North
  Temp = 26.4^{0}C
  pH = 8.41
  Conductivity = 254.1
  Dissolved Oxygen = 4.7
- Alameda
  Temp = 28.9^{0}C
  pH = 8.40
  Conductivity = 272.1
  Dissolved Oxygen = 4.5

Client Sample Results

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Client Sample ID: RG- North 20240626
Lab Sample ID: 885-6986-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/26/24 16:49

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	108.0		10.0	10.0	MPN/100mL			06/26/24 18:09	1

Client Sample Results

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Client Sample ID: RG- Alameda 20240626
Lab Sample ID: 885-6986-2
Date Collected: 06/26/24 16:28
Matrix: Water
Date Received: 06/26/24 16:49

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	97.0		10.0	10.0	MPN/100mL			06/26/24 18:09	1

QC Sample Results

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Project/Site: CMC

Job ID: 885-6986-1

Method: 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Lab Sample ID: MB 885-7444/1
Matrix: Water
Analysis Batch: 7444

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
0. cherichia coli	ND		1rh	1rh	MPN/1LL2 4			L6/E6/Ef 18:L9	1

0urosin. Albuquerque

7/1/2024

Biology

Analysis Batch: 7444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6986-1	RG- North 20240626	Total/NA	Water	9223B	
885-6986-2	RG- Alameda 20240626	Total/NA	Water	9223B	
MB 885-7444/1	Method Blank	Total/NA	Water	9223B	

Lab Chronicle

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Client Sample ID: RG- North 20240626
Lab Sample ID: 885-6986-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/26/24 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7444	KH	EET ALB	06/26/24 18:09

Client Sample ID: RG- Alameda 20240626
Lab Sample ID: 885-6986-2
Date Collected: 06/26/24 16:28
Matrix: Water
Date Received: 06/26/24 16:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9223B		1	7444	KH	EET ALB	06/26/24 18:09

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-6986-1
Project/Site: CMC

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25

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
9223B		Water	Escherichia coli

Chain-of-Custody Record

Client: AMAFCA

Mailing Address:

Phone #:

email or Fax#: pcaver@AMAFCA.org

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: CMC

Project #:

Project Manager: Patrick Chaver

Sampler: I Torres

On Ice: ☑ Yes ☐ No

# of Coolers: 1 (yoyi)

Cooler Temp (including CF): 26.3 ±0=26.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LAB
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM
Tel. 505-345-3975 Fax 505-345-4107

885-6986 COC

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Analysis Request: E.coli Enumeration
6/24	1505	AQ	RG-North 20240626	1 Bottle	NA THO												X
1	1620	1	RG-Alameda 20240626	1	1												X

Date	Time	Relinquished by	Received by	Via	Date	Time
6/26/24	1647			CPO	6/26/24	10:49
Date	Time	Relinquished by	Received by	Via	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories This serves as notice of this possibility Any sub-contracted data will be clearly notated on the analytical report.

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-6986-1

Login Number: 6986
List Number: 1
Creator: McQuiston, Steven

List Source: Eurofins Albuquerque

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.	False	Received same day of collection; chilling process has begun.
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Chavez
Albuquerque Metropolitan Arroyo Flood Control Authority
2600 Prospect Ave NE
Albuquerque, New Mexico 87107

Generated 7/31/2024 2:26:56 PM

JOB DESCRIPTION

CMC

JOB NUMBER

885-7077-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

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 Environment Testing South Central, LLC Project Manager.

Authorization

Generated
7/31/2024 2:26:56 PM

Authorized for release by
Erin Munoz, Project Manager
Erin.Munoz@et.eurofinsus.com
(505)345-3975

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Dioxin

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.
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.

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.

General Chemistry

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
b	Result Detected in the Unseeded Control blank (USB).
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
885-7077-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/27/2024 2:37 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.9°C and 10.4°C.

Subcontract Work
Method Hexavalent Chromium: This method was subcontracted to Pace Analytical Services LLC. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

GC/MS VOA
Method 624.1: The following samples were received outside of holding time: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2).

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

GC/MS Semi VOA
Method 625.1_QQQ: Surrogate recovery for the following sample was outside the upper control limit: RG-North20240626 (885-7077-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 625.1_QQQ: Six surrogates are used for this analysis. The laboratory's SOP allows one base and one acid of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: RG-South20240627 (885-7077-2). These results have been reported and qualified.

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

Pesticides
Method 8081B_LL: The surrogate recovery for the blank associated with preparation batch 860-169461 and analytical batch 860-169649 was outside the upper control limits.

Method 8081B_LL: The surrogate recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with preparation batch 860-169461 and analytical batch 860-169649 was outside the upper control limits.

(LCS 860-169461/2-A) and (LCSD 860-169461/3-A)

Method 8081B_LL: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-169461 and analytical batch 860-169649 recovered outside control limits for the following analytes: Dieldrin. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

Pesticides/PCBs
Method 608.3: The Tetrachloro-m-xylene surrogate recovery for the following samples was outside acceptance limits (high biased) on the primary column: (LCS 860-169312/2-A), (LCSD 860-169312/3-A) and (MB 860-169312/1-A). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control.

Job ID: 885-7077-1 (Continued) Eurofins Albuquerque

Method 608.3: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-169312 and analytical batch 860-169369 recovered outside control limits for the following analytes: Dieldrin. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 608.3: The surrogate recovery for the blank associated with preparation batch 860-169818 and analytical batch 860-169920 was outside the upper control limits.

(MB 860-169818/1-A)

Method 608.3: The surrogate recovery for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with preparation batch 860-169818 and analytical batch 860-169920 was outside the upper control limits.

(LCS 860-169818/2-A) and (LCSD 860-169818/3-A)

Method 608.3: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-169818 and analytical batch 860-169920 recovered outside control limits for the following analytes: Dieldrin. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 608.3: Surrogate recovery for the following samples were outside the upper control limit: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 608.3: The following samples were prepared outside of preparation holding time due to surrogate recovery outside control limits (low biased) for original extraction: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2).

Method 608.3: Surrogate recovery for the following sample was outside control limits: RG-North20240626 (885-7077-1). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control limits.

Method 608.3: Surrogate recovery for the following samples were outside control limits: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2). Re-extraction and/or re-analysis was performed and surrogate recovery was outside control limits.

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

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

PFAS
Method 1633: The following samples in preparation batch 320-779486 were observed to have a thin layer of sediment present in the bottom of the bottle prior to extraction. RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2)

Method 1633: The following samples in preparation batch 320-779486 were brown in color prior to extraction. RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2)

Method 1633: The following samples in preparation batch 320-779486 were yellow in color following extraction. RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2)

Method 1633: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 320-779486.

Method 1633: The following samples were received preserved with Trizma. Preservation was not added to batch QC samples. RG-North20240626 (885-7077-1), RG-South20240627 (885-7077-2) and EB-20240627 (885-7077-3)

Method 1633: The "I" qualifier means the transition mass ratio for the indicated analyte was outside the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte: RG-North20240626 (885-7077-1) and RG-South20240627 (885-7077-2).

Method 1633: The continuing calibration verification (CCV) associated with batch 320-780306 recovered above the upper control limit for Perfluoroheptanesulfonic acid (PFHpS), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS), 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) and 3-Perfluoroheptylpropanoic acid (7:3 FTCA). The samples associated with this CCV were non-detects for the affected analytes;

therefore, the data have been reported. RG-North20240626 (885-7077-1), RG-South20240627 (885-7077-2), EB-20240627 (885-7077-3) and (CCV 320-780306/1).

Method 1633: The continuing calibration verification (CCV) associated with batch 320-780306 recovered above the upper control limit for 1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS), 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS) and 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. RG-North20240626 (885-7077-1), RG-South20240627 (885-7077-2), EB-20240627 (885-7077-3) and (CCV 320-780306/10).

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

Hi-Res PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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

General Chemistry
Method SM5210B_BODCalc: The glucose-glutamic acid standard (LCS) recovered outside the recovery limits specified in the method in batch 885-7579. The method holding time had expired, therefore the analysis was not repeated. The data was qualified and reported.

Method SM5210B_BODCalc: The method blank result associated with batch 885-7579 was higher than the method-required limit of 0.2 mg/L.

Method SM5210B_BODCalc: Chlorine was present in the following sample and treated per Method/SOP: RG-North20240626 (885-7077-1). Results may be biased low.

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

Gas Flow Proportional Counter
Method 900.0: Gross Alpha Beta prep batch 160-669229:

The detection goal was not met for the following samples due to a reduction of the sample size attributed to high residual mass: RG-North20240626 (885-7077-1), RG-South20240627 (885-7077-2) and (885-7077-K-2-D DU). Analytical results are reported with the detection limit achieved.

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

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

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

06/26/2024: Rio Grande North and 06/27/2024 Rio Grande South; both full suite of testing.

Field Parameters:
- North
  Temp = 26.4^{0}C
  pH = 8.41
  Conductivity = 254.1
  Dissolved Oxygen = 4.7
- South
  Temp = 28.3^{0}C
  pH = 8.30
  Conductivity = 337.0
  Dissolved Oxygen = 5.5

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND	H	0.010	0.0018	mg/L			07/03/24 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*07/03/24 02:47*	*1*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*		*07/03/24 02:47*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 131*		*07/03/24 02:47*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/03/24 02:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzidine	ND		1.2	0.091	ug/L		07/02/24 12:40	07/03/24 19:01	1
Benzo[a]anthracene	ND	*+	0.12	0.0096	ug/L		07/02/24 12:40	07/03/24 19:01	1
Benzo[b]fluoranthene	ND	*+	0.58	0.067	ug/L		07/02/24 12:40	07/03/24 19:01	1
Bis(2-ethylhexyl) phthalate	ND	*+	2.9	1.4	ug/L		07/02/24 12:40	07/03/24 19:01	1
Chrysene	ND	*+	0.58	0.082	ug/L		07/02/24 12:40	07/03/24 19:01	1
Dibenz(a,h)anthracene	ND		0.12	0.051	ug/L		07/02/24 12:40	07/03/24 19:01	1
Dibenzofuran	ND		0.58	0.11	ug/L		07/02/24 12:40	07/03/24 19:01	1
Indeno[1,2,3-cd]pyrene	ND		0.58	0.10	ug/L		07/02/24 12:40	07/03/24 19:01	1
Pentachlorophenol	ND		1.2	1.0	ug/L		07/02/24 12:40	07/03/24 19:01	1
Benzo[k]fluoranthene	ND	*+	0.58	0.048	ug/L		07/02/24 12:40	07/03/24 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*43 - 130*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
2-Fluorophenol (Surr)	*107*		*19 - 120*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
Nitrobenzene-d5 (Surr)	*151*	*S1+*	*37 - 133*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
Phenol-d5 (Surr)	*77*		*8 - 124*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
p-Terphenyl-d14 (Surr)	*98*		*47 - 130*	*07/02/24 12:40*	*07/03/24 19:01*	*1*
2,4,6-Tribromophenol (Surr)	*115*		*35 - 130*	*07/02/24 12:40*	*07/03/24 19:01*	*1*

Method: EPA 608.3 - Organochlorine Pesticides/PCBs in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND	*+	0.000052	0.000018	mg/L		07/02/24 22:42	07/03/24 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*24*	*S1-*	*45 - 115*	*07/02/24 22:42*	*07/03/24 14:47*	*1*
Tetrachloro-m-xylene	*138*	*S1+*	*41 - 110*	*07/02/24 22:42*	*07/03/24 14:47*	*1*

Method: SW846 8081B_LL - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND	*+	0.000010	0.00000081	mg/L		07/03/24 13:50	07/05/24 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*107*		*15 - 136*	*07/03/24 13:50*	*07/05/24 11:41*	*1*
Tetrachloro-m-xylene	*104*		*18 - 126*	*07/03/24 13:50*	*07/05/24 11:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate	**0.14**		0.10	0.020	mg/L			06/28/24 11:40	1
Nitrite	ND		0.10	0.012	mg/L			06/28/24 11:40	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoropentanoic acid (PFPeA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorohexanoic acid (PFHxA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoroheptanoic acid (PFHpA)	1.5	J	3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorooctanoic acid (PFOA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorononanoic acid (PFNA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorodecanoic acid (PFDA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoroundecanoic acid (PFUnA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorododecanoic acid (PFDoA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorotridecanoic acid (PFTrDA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorotetradecanoic acid (PFTeDA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoropentanesulfonic acid (PFPeS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorooctanesulfonic acid (PFOS)	1.6	J I	3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorononanesulfonic acid (PFNS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorododecanesulfonic acid (PFDoS)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluorooctanesulfonamide (PFOSA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.4	0.85	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		34	8.5	ng/L		07/15/24 11:26	07/16/24 19:22	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		34	8.5	ng/L		07/15/24 11:26	07/16/24 19:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		14	3.4	ng/L		07/15/24 11:26	07/16/24 19:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		6.8	1.7	ng/L		07/15/24 11:26	07/16/24 19:22	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		17	4.3	ng/L		07/15/24 11:26	07/16/24 19:22	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		85	21	ng/L		07/15/24 11:26	07/16/24 19:22	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		85	21	ng/L		07/15/24 11:26	07/16/24 19:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89.0*		*5 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C5 PFPeA	*95.3*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C5 PFHxA	*85.5*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C4 PFHpA	*104*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C8 PFOA	*96.2*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C9 PFNA	*88.0*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C6 PFDA	*96.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C7 PFUnA	*84.5*		*30 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 PFDoA	*86.7*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 PFTeDA	*67.2*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C3 PFHxS	*78.0*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C8 PFOS	*98.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C8 PFOSA	*89.4*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d3-NMeFOSAA	*106*		*40 - 170*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d5-NEtFOSAA	*104*		*25 - 135*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 4:2 FTS	*99.5*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 6:2 FTS	*116*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C2 8:2 FTS	*101*		*40 - 300*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
13C3 HFPO-DA	*85.6*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d7-N-MeFOSE-M	*68.6*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d9-N-EtFOSE-M	*66.5*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d5-NEtPFOSA	*68.4*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*
d3-NMePFOSA	*70.3*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:22*	*1*

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**0.89**	**J**	3.4	0.85	ng/L		07/15/24 11:26	07/17/24 15:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 PFBS	*71.5*		*40 - 135*	*07/15/24 11:26*	*07/17/24 15:03*	*1*

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		21	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-2	ND		210	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-3	ND		62	49	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-4	ND		41	25	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-5	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-6	ND		210	25	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-7	ND		210	19	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-8	ND		210	27	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-9	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-10	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-11	ND		210	150	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-12	ND		410	31	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-13	ND		410	31	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-14	ND		210	72	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-15	ND		41	22	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-16	ND		210	7.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-17	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-18	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-19	ND		21	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-20	ND		410	21	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-21	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-22	ND		210	7.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-23	ND		210	8.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-24	ND		210	9.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-25	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-26	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-27	ND		210	9.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-28	ND		410	21	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-29	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-30	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-31	ND		210	21	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-32	ND		210	9.8	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-33	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-34	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-35	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-36	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-37	ND		21	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-38	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-39	ND		210	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-40	ND		410	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-41	ND		210	8.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-42	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-43	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-44	ND		620	36	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-45	ND		410	7.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-46	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-47	ND		620	36	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-48	ND		210	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-49	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-50	ND		410	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-51	ND		410	8.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-52	ND		210	25	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-53	ND		410	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-54	ND		21	8.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-55	ND		210	7.8	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-56	ND		210	6.8	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-57	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-58	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-59	ND		620	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-60	ND		210	9.7	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-61	ND		820	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-62	ND		620	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-63	ND		210	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-64	ND		210	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-65	ND		620	36	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-66	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-67	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-68	ND		210	9.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-69	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-70	ND		820	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-71	ND		410	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-72	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-73	ND		210	5.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-74	ND		820	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-75	ND		620	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-76	ND		820	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-77	ND		21	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-78	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-79	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-80	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-81	ND		21	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-82	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-83	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-84	ND		210	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-85	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-86	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-87	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-88	ND		410	9.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-89	ND		210	8.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-90	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-91	ND		410	9.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-92	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-93	ND		410	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-94	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-95	ND		210	32	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-96	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-97	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-98	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-99	ND		410	8.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-100	ND		410	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-101	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-102	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-103	ND		210	8.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-104	ND		21	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-105	ND		21	9.5	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-106	ND		210	8.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-107	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-108	ND		410	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-109	ND		1200	5.1	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-110	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-111	ND		210	8.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-112	ND		210	6.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-113	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-114	ND		21	7.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-115	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-116	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-117	ND		620	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-118	ND		21	9.1	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-119	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-120	ND		210	5.8	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-121	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-122	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-123	ND		21	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-124	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-125	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-126	ND		21	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-127	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-128	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-129	ND		820	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-130	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-131	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-132	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-133	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-134	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-135	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-136	ND		210	6.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-137	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-138	ND		820	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-139	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-140	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-141	ND		210	7.4	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-142	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-143	ND		410	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-144	ND		210	6.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-145	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-146	ND		210	7.3	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-147	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-148	ND		210	6.8	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-149	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-150	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-151	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-152	ND		210	5.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-153	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-154	ND		210	5.9	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-155	ND		21	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-156	ND		41	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-157	ND		41	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-158	ND		210	11	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-159	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-160	ND		820	7.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-161	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-162	ND		210	9.2	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-163	ND		820	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-164	ND		210	21	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-165	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-166	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-167	ND		21	7.9	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-168	ND		410	9.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-169	ND		21	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-170	ND		210	19	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-171	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-172	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-173	ND		410	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-174	ND		210	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-175	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-176	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-177	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-178	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-179	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-180	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-181	ND		210	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-182	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-183	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-184	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-185	ND		210	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-186	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-187	ND		210	19	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-188	ND		21	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-189	ND		21	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-190	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-191	ND		210	20	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-192	ND		210	17	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-193	ND		410	10	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-194	ND		210	9.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-195	ND		210	18	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-196	ND		210	16	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-197	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-198	ND		410	8.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-199	ND		410	8.0	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-200	ND		210	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-201	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-202	ND		21	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-203	ND		210	14	pg/L		07/08/24 12:40	07/12/24 04:49	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-204	ND		210	13	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-205	ND		21	15	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-206	ND		21	8.5	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-207	ND		210	5.6	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-208	ND		21	12	pg/L		07/08/24 12:40	07/12/24 04:49	1
PCB-209	ND		21	12	pg/L		07/08/24 12:40	07/12/24 04:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*70*		*15 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-3L	*72*		*15 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-4L	*66*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-15L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-19L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-37L	*67*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-54L	*57*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-77L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-81L	*74*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-104L	*52*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-105L	*73*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-114L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-118L	*73*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-123L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-126L	*77*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-155L	*59*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-156L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-156L/157L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-157L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-167L	*93*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-169L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-188L	*55*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-189L	*73*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-202L	*65*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-205L	*79*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-206L	*74*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-208L	*65*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-209L	*71*		*25 - 150*	*07/08/24 12:40*	*07/12/24 04:49*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*68*		*30 - 135*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-111L	*75*		*30 - 135*	*07/08/24 12:40*	*07/12/24 04:49*	*1*
PCB-178L	*85*		*30 - 135*	*07/08/24 12:40*	*07/12/24 04:49*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	33		1.0	0.053	mg/L		07/02/24 13:43	07/10/24 15:01	1
Magnesium	6.4		1.0	0.033	mg/L		07/02/24 13:43	07/08/24 12:07	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	1.5		1.0	0.15	ug/L		07/16/24 15:34	07/19/24 14:39	2

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.00050	0.000083	mg/L			07/09/24 10:31	1
Copper	0.00095		0.00050	0.00012	mg/L			07/09/24 10:31	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	110		6.6	2.5	mg/L			07/09/24 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (1664B)	ND		5.0	4.4	mg/L			07/08/24 09:19	1
Total Dissolved Solids (SM 2540C)	250		50	25	mg/L			07/02/24 14:21	1
Nitrogen, Total Kjeldahl (EPA 351.2)	0.60		0.50	0.50	mg/L		07/08/24 11:40	07/09/24 13:01	1
Total Phosphorus as P (EPA 365.1)	0.13		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:30	1
Chemical Oxygen Demand (SM 5220D)	ND		50	50	mg/L			07/09/24 14:14	1
Total Suspended Solids (SM 2540D)	58		4.0	4.0	mg/L			07/02/24 16:35	1
pH (SM 4500 H+ B)	8.1	HF	0.1	0.1	SU			07/09/24 22:21	1
Biochemical Oxygen Demand (SM5210B)	2.0	*- b	2.0	2.0	mg/L			06/28/24 11:05	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P (EPA 365.1)	0.055		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:32	1

Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	6.25	G	2.76	2.85	3.00	3.55	pCi/L	07/03/24 08:58	07/18/24 17:21	1
Gross Beta	5.30		1.17	1.28	4.00	1.26	pCi/L	07/03/24 08:58	07/18/24 17:21	1

Method: SM Gross Alpha Adj - Gross Alpha Adjusted

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Adjusted Gross Alpha	5.25				3.00	3.55	pCi/L		07/19/24 14:39	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND	H	0.010	0.0018	mg/L			07/03/24 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*07/03/24 03:08*	*1*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*		*07/03/24 03:08*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 131*		*07/03/24 03:08*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/03/24 03:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzidine	ND		1.1	0.090	ug/L		07/02/24 12:40	07/05/24 15:46	1
Benzo[a]anthracene	ND	*+	0.11	0.0095	ug/L		07/02/24 12:40	07/05/24 15:46	1
Benzo[b]fluoranthene	ND	*+	0.57	0.066	ug/L		07/02/24 12:40	07/05/24 15:46	1
Bis(2-ethylhexyl) phthalate	ND	*+	2.8	1.4	ug/L		07/02/24 12:40	07/05/24 15:46	1
Chrysene	ND	*+	0.57	0.081	ug/L		07/02/24 12:40	07/05/24 15:46	1
Dibenz(a,h)anthracene	ND		0.11	0.051	ug/L		07/02/24 12:40	07/05/24 15:46	1
Dibenzofuran	ND		0.57	0.11	ug/L		07/02/24 12:40	07/05/24 15:46	1
Indeno[1,2,3-cd]pyrene	ND		0.57	0.10	ug/L		07/02/24 12:40	07/05/24 15:46	1
Pentachlorophenol	ND		1.1	1.0	ug/L		07/02/24 12:40	07/05/24 15:46	1
Benzo[k]fluoranthene	ND	*+	0.57	0.047	ug/L		07/02/24 12:40	07/05/24 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*123*		*43 - 130*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
2-Fluorophenol (Surr)	*87*		*19 - 120*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
Nitrobenzene-d5 (Surr)	*144*	*S1+*	*37 - 133*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
Phenol-d5 (Surr)	*61*		*8 - 124*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
p-Terphenyl-d14 (Surr)	*89*		*47 - 130*	*07/02/24 12:40*	*07/05/24 15:46*	*1*
2,4,6-Tribromophenol (Surr)	*153*	*S1+*	*35 - 130*	*07/02/24 12:40*	*07/05/24 15:46*	*1*

Method: EPA 608.3 - Organochlorine Pesticides/PCBs in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND	*+	0.000053	0.000018	mg/L		07/02/24 22:42	07/03/24 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*29*	*S1-*	*45 - 115*	*07/02/24 22:42*	*07/03/24 14:58*	*1*
Tetrachloro-m-xylene	*145*	*S1+*	*41 - 110*	*07/02/24 22:42*	*07/03/24 14:58*	*1*

Method: SW846 8081B_LL - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND	*+	0.000010	0.0000000 81	mg/L		07/03/24 13:50	07/05/24 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*103*		*15 - 136*	*07/03/24 13:50*	*07/05/24 12:10*	*1*
Tetrachloro-m-xylene	*111*		*18 - 126*	*07/03/24 13:50*	*07/05/24 12:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate	**0.62**		0.10	0.020	mg/L			06/28/24 12:29	1
Nitrite	ND		0.10	0.012	mg/L			06/28/24 12:29	1

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.8	J	12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoropentanoic acid (PFPeA)	3.1	J	6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorohexanoic acid (PFHxA)	2.2	J	3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorooctanoic acid (PFOA)	1.5	J	3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorononanoic acid (PFNA)	1.0	J	3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorodecanoic acid (PFDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoroundecanoic acid (PFUnA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorododecanoic acid (PFDoA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorotridecanoic acid (PFTrDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorotetradecanoic acid (PFTeDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoropentanesulfonic acid (PFPeS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorohexanesulfonic acid (PFHxS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorooctanesulfonic acid (PFOS)	1.6	J I	3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorononanesulfonic acid (PFNS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorodecanesulfonic acid (PFDS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorododecanesulfonic acid (PFDoS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluorooctanesulfonamide (PFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		30	7.6	ng/L		07/15/24 11:26	07/16/24 19:39	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		30	7.6	ng/L		07/15/24 11:26	07/16/24 19:39	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:39	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:39	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		15	3.8	ng/L		07/15/24 11:26	07/16/24 19:39	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		76	19	ng/L		07/15/24 11:26	07/16/24 19:39	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		76	19	ng/L		07/15/24 11:26	07/16/24 19:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95.6*		*5 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C5 PFPeA	*102*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C5 PFHxA	*96.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C4 PFHpA	*110*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C8 PFOA	*96.8*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C9 PFNA	*87.6*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C6 PFDA	*94.8*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C7 PFUnA	*94.3*		*30 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 PFDoA	*86.3*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 PFTeDA	*71.2*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C3 PFHxS	*82.6*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C8 PFOS	*105*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C8 PFOSA	*94.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d3-NMeFOSAA	*104*		*40 - 170*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d5-NEtFOSAA	*111*		*25 - 135*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 4:2 FTS	*99.0*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 6:2 FTS	*117*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C2 8:2 FTS	*107*		*40 - 300*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
13C3 HFPO-DA	*93.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d7-N-MeFOSE-M	*66.7*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d9-N-EtFOSE-M	*63.5*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d5-NEtPFOSA	*65.1*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*
d3-NMePFOSA	*67.6*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:39*	*1*

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	**4.1**		3.0	0.76	ng/L		07/15/24 11:26	07/17/24 15:21	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 PFBS	*78.6*		*40 - 135*	*07/15/24 11:26*	*07/17/24 15:21*	*1*

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		21	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-2	ND		210	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-3	ND		62	50	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-4	ND		41	25	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-5	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-6	ND		210	26	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-7	ND		210	19	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-8	ND		210	27	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-9	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-10	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-11	ND		210	150	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-12	ND		410	32	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-13	ND		410	32	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-14	ND		210	73	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-15	ND		41	22	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-16	ND		210	7.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-17	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-18	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-19	ND		21	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-20	ND		410	22	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-21	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-22	ND		210	7.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-23	ND		210	8.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-24	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-25	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-26	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-27	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-28	ND		410	22	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-29	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-30	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-31	ND		210	21	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-32	ND		210	9.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-33	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-34	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-35	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-36	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-37	ND		21	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-38	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-39	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-40	ND		410	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-41	ND		210	8.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-42	ND		210	8.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-43	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-44	ND		620	36	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-45	ND		410	8.0	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-46	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-47	ND		620	36	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-48	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-49	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-50	ND		410	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-51	ND		410	8.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-52	ND		210	25	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-53	ND		410	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-54	ND		21	8.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-55	ND		210	7.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-56	ND		210	6.9	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-57	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-58	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-59	ND		620	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-60	ND		210	9.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-61	ND		830	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-62	ND		620	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-63	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-64	ND		210	9.8	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-65	ND		620	36	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-66	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-67	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-68	ND		210	9.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-69	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-70	ND		830	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-71	ND		410	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-72	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-73	ND		210	5.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-74	ND		830	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-75	ND		620	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-76	ND		830	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-77	ND		21	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-78	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-79	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-80	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-81	ND		21	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-82	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-83	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-84	ND		210	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-85	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-86	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-87	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-88	ND		410	9.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-89	ND		210	8.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-90	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-91	ND		410	9.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-92	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-93	ND		410	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-94	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-95	ND		210	33	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-96	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-97	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-98	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-99	ND		410	8.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-100	ND		410	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-101	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-102	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-103	ND		210	9.0	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-104	ND		21	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-105	ND		21	9.6	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-106	ND		210	8.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-107	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-108	ND		410	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-109	ND		1200	5.2	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-110	**21**	**J q**	410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-111	ND		210	9.0	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-112	ND		210	6.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-113	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-114	ND		21	8.0	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-115	**21**	**J q**	410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-116	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-117	ND		620	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-118	**13**	**J q**	21	9.2	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-119	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-120	ND		210	5.8	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-121	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-122	ND		210	8.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-123	ND		21	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-124	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-125	ND		1200	30	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-126	ND		21	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-127	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-128	ND		410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-129	**28**	**J q**	830	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-130	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-131	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-132	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-133	ND		210	11	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-134	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-135	ND		410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-136	ND		210	6.3	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-137	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-138	**28**	**J q**	830	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-139	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-140	ND		410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-141	ND		210	7.5	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-142	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-143	ND		410	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-144	ND		210	6.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-145	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-146	ND		210	7.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-147	**23**	**J q**	410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-148	ND		210	6.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-149	**23**	**J q**	410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-150	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-151	ND		410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-152	ND		210	5.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-153	**26**	**J**	410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-154	ND		210	6.0	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-155	ND		21	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-156	ND		41	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-157	ND		41	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-158	ND		210	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-159	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-160	**28**	**J q**	830	7.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-161	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-162	ND		210	9.4	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-163	**28**	**J q**	830	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-164	ND		210	21	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-165	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-166	ND		410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-167	ND		21	7.9	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-168	**26**	**J**	410	9.7	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-169	ND		21	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-170	ND		210	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-171	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-172	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-173	ND		410	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-174	ND		210	17	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-175	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-176	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-177	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-178	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-179	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-180	**29**	**J**	410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-181	ND		210	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-182	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-183	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-184	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-185	ND		210	13	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-186	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-187	ND		210	20	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-188	ND		21	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-189	ND		21	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-190	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-191	ND		210	21	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-192	ND		210	18	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-193	**29**	**J**	410	10	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-194	ND		210	9.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-195	ND		210	19	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-196	ND		210	16	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-197	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-198	ND		410	8.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-199	ND		410	8.1	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-200	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-201	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-202	ND		21	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-203	ND		210	15	pg/L		07/08/24 12:40	07/12/24 05:52	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-204	ND		210	14	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-205	ND		21	15	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-206	ND		21	8.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-207	ND		210	5.6	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-208	ND		21	12	pg/L		07/08/24 12:40	07/12/24 05:52	1
PCB-209	ND		21	12	pg/L		07/08/24 12:40	07/12/24 05:52	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*72*		*15 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-3L	*74*		*15 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-4L	*65*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-15L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-19L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-37L	*70*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-54L	*62*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-77L	*79*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-81L	*76*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-104L	*53*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-105L	*70*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-114L	*68*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-118L	*67*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-123L	*68*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-126L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-155L	*62*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-156L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-156L/157L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-157L	*96*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-167L	*94*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-169L	*95*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-188L	*53*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-189L	*64*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-202L	*60*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-205L	*72*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-206L	*62*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-208L	*63*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-209L	*70*		*25 - 150*	*07/08/24 12:40*	*07/12/24 05:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-28L	*75*		*30 - 135*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-111L	*78*		*30 - 135*	*07/08/24 12:40*	*07/12/24 05:52*	*1*
PCB-178L	*93*		*30 - 135*	*07/08/24 12:40*	*07/12/24 05:52*	*1*

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**41**		1.0	0.053	mg/L		07/02/24 13:43	07/10/24 15:03	1
Magnesium	**8.3**		1.0	0.033	mg/L		07/02/24 13:43	07/08/24 12:11	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	**1.6**		1.0	0.15	ug/L		07/16/24 15:34	07/19/24 15:03	2

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.010		0.00050	0.00012	mg/L			07/09/24 10:34	1
Lead	ND		0.00050	0.000083	mg/L			07/09/24 10:34	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	140		6.6	2.5	mg/L			07/09/24 15:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (1664B)	ND		4.9	4.4	mg/L			07/08/24 09:19	1
Total Dissolved Solids (SM 2540C)	280		100	50	mg/L			07/03/24 12:52	1
Nitrogen, Total Kjeldahl (EPA 351.2)	0.99		0.50	0.50	mg/L		07/08/24 11:40	07/09/24 13:02	1
Total Phosphorus as P (EPA 365.1)	0.38		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:34	1
Chemical Oxygen Demand (SM 5220D)	ND		50	50	mg/L			07/23/24 14:19	1
Total Suspended Solids (SM 2540D)	160		8.0	8.0	mg/L			07/02/24 16:35	1
pH (SM 4500 H+ B)	8.2	HF	0.1	0.1	SU			07/09/24 22:10	1
Biochemical Oxygen Demand (SM5210B)	ND	*- b	2.0	2.0	mg/L			06/28/24 11:05	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P (EPA 365.1)	0.37		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:36	1

Method: EPA 900.0 - Gross Alpha and Gross Beta Radioactivity

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	4.84	G	3.13	3.18	3.00	4.46	pCi/L	07/03/24 08:58	07/18/24 17:21	1
Gross Beta	7.45		1.73	1.88	4.00	1.91	pCi/L	07/03/24 08:58	07/18/24 17:21	1

Method: SM Gross Alpha Adj - Gross Alpha Adjusted

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Adjusted Gross Alpha	3.77	U			3.00	4.46	pCi/L		07/19/24 15:03	1

Method: SM 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	644.0		10.0	10.0	MPN/100mL			06/27/24 17:12	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: EB-20240627
Lab Sample ID: 885-7077-3
Date Collected: 06/27/24 11:50
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoropentanoic acid (PFPeA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorohexanoic acid (PFHxA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoroheptanoic acid (PFHpA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorooctanoic acid (PFOA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorononanoic acid (PFNA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorodecanoic acid (PFDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoroundecanoic acid (PFUnA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorododecanoic acid (PFDoA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorotridecanoic acid (PFTrDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorotetradecanoic acid (PFTeDA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoropentanesulfonic acid (PFPeS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorononanesulfonic acid (PFNS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorododecanesulfonic acid (PFDoS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluorooctanesulfonamide (PFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		30	7.6	ng/L		07/15/24 11:26	07/16/24 19:57	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		30	7.6	ng/L		07/15/24 11:26	07/16/24 19:57	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		12	3.0	ng/L		07/15/24 11:26	07/16/24 19:57	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: EB-20240627
Lab Sample ID: 885-7077-3
Date Collected: 06/27/24 11:50
Matrix: Water
Date Received: 06/27/24 14:37

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		6.1	1.5	ng/L		07/15/24 11:26	07/16/24 19:57	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		15	3.8	ng/L		07/15/24 11:26	07/16/24 19:57	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		76	19	ng/L		07/15/24 11:26	07/16/24 19:57	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		76	19	ng/L		07/15/24 11:26	07/16/24 19:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89.6*		*5 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C5 PFPeA	*96.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C5 PFHxA	*89.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C4 PFHpA	*106*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C8 PFOA	*96.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C9 PFNA	*88.8*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C6 PFDA	*99.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C7 PFUnA	*97.0*		*30 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 PFDoA	*90.4*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 PFTeDA	*74.0*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C3 PFHxS	*79.9*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C8 PFOS	*95.1*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C8 PFOSA	*80.2*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d3-NMeFOSAA	*98.6*		*40 - 170*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d5-NEtFOSAA	*98.9*		*25 - 135*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 4:2 FTS	*81.5*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 6:2 FTS	*110*		*40 - 200*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C2 8:2 FTS	*95.1*		*40 - 300*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
13C3 HFPO-DA	*96.3*		*40 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d7-N-MeFOSE-M	*64.2*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d9-N-EtFOSE-M	*64.8*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d5-NEtPFOSA	*64.9*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*
d3-NMePFOSA	*66.7*		*10 - 130*	*07/15/24 11:26*	*07/16/24 19:57*	*1*

Method: EPA Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		3.0	0.76	ng/L		07/15/24 11:26	07/17/24 15:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 PFBS	*74.9*		*40 - 135*	*07/15/24 11:26*	*07/17/24 15:38*	*1*

Isotope Dilution Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	13C5PHA	C4PFHA	C8PFOA	C9PFNA	C6PFDA	13C7PUA
Lab Sample ID	Client Sample ID	(5-130)	(40-130)	(40-130)	(40-130)	(40-130)	(40-130)	(40-130)	(30-130)
885-7077-1	RG-North20240626	89.0	95.3	85.5	104	96.2	88.0	96.9	84.5
885-7077-2	RG-South20240627	95.6	102	96.9	110	96.8	87.6	94.8	94.3
885-7077-3	EB-20240627	89.6	96.9	89.9	106	96.1	88.8	99.9	97.0
LCS 320-779486/3-A	Lab Control Sample	92.1	97.5	95.3	110	96.2	87.6	99.7	109
LCSD 320-779486/4-A	Lab Control Sample Dup	90.7	96.1	93.8	111	88.0	103	101	99.1
LLCS 320-779486/2-A	Lab Control Sample	95.3	100	98.9	113	99.9	79.9	91.0	84.8
MB 320-779486/1-A	Method Blank	102	107	102	117	102	103	106	119

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFDoA	PFTDA	C3PFHS	C8PFOS	PFOSA	d3NMFOS	d5NEFOS	M242FTS
Lab Sample ID	Client Sample ID	(10-130)	(10-130)	(40-130)	(40-130)	(40-130)	(40-170)	(25-135)	(40-200)
885-7077-1	RG-North20240626	86.7	67.2	78.0	98.1	89.4	106	104	99.5
885-7077-2	RG-South20240627	86.3	71.2	82.6	105	94.1	104	111	99.0
885-7077-3	EB-20240627	90.4	74.0	79.9	95.1	80.2	98.6	98.9	81.5
LCS 320-779486/3-A	Lab Control Sample	102	88.1	85.2	89.5	83.7	94.8	97.4	81.3
LCSD 320-779486/4-A	Lab Control Sample Dup	99.9	86.8	83.5	92.0	88.4	105	103	81.3
LLCS 320-779486/2-A	Lab Control Sample	85.0	84.0	87.2	98.8	99.4	101	103	80.8
MB 320-779486/1-A	Method Blank	123	111	93.5	100	101	101	104	91.6

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M262FTS	M282FTS	HFPODA	NMFM	NEFM	d5NPFSA	d3NMFSA	
Lab Sample ID	Client Sample ID	(40-200)	(40-300)	(40-130)	(10-130)	(10-130)	(10-130)	(10-130)	
885-7077-1	RG-North20240626	116	101	85.6	68.6	66.5	68.4	70.3	
885-7077-2	RG-South20240627	117	107	93.1	66.7	63.5	65.1	67.6	
885-7077-3	EB-20240627	110	95.1	96.3	64.2	64.8	64.9	66.7	
LCS 320-779486/3-A	Lab Control Sample	98.3	84.9	90.7	74.1	78.3	75.7	74.2	
LCSD 320-779486/4-A	Lab Control Sample Dup	97.3	86.6	91.8	80.2	85.0	78.0	76.3	
LLCS 320-779486/2-A	Lab Control Sample	106	92.8	92.4	89.4	91.8	84.5	85.9	
MB 320-779486/1-A	Method Blank	115	96.6	96.7	92.3	94.4	87.2	86.3	

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 PFOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = 13C2 4:2 FTS
M262FTS = 13C2 6:2 FTS
M282FTS = 13C2 8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M

Isotope Dilution Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
		C3PFBS
Lab Sample ID	Client Sample ID	(40-135)
885-7077-1 - RA	RG-North20240626	71.5
885-7077-2 - RA	RG-South20240627	78.6
885-7077-3 - RA	EB-20240627	74.9
LCS 320-779486/3-A - RA	Lab Control Sample	78.1
LCSD 320-779486/4-A - RA	Lab Control Sample Dup	75.3
LLCS 320-779486/2-A - RA	Lab Control Sample	75.8
MB 320-779486/1-A - RA	Method Blank	82.7

Surrogate Legend

C3PFBS = 13C3 PFBS

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB1L	PCB3L	PCB4L	PCB15L	PCB19L	PCB37L	PCB54L	PCB77L
Lab Sample ID	Client Sample ID	(15-150)	(15-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
885-7077-1	RG-North20240626	70	72	66	76	76	67	57	76
885-7077-2	RG-South20240627	72	74	65	72	76	70	62	79
MB 320-777390/1-A	Method Blank	74	75	68	80	79	77	68	88

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB81L	PCB104L	PCB105L	PCB114L	PCB118L	PCB123L	PCB126L	PCB155L
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
885-7077-1	RG-North20240626	74	52	73	72	73	72	77	59
885-7077-2	RG-South20240627	76	53	70	68	67	68	72	62
MB 320-777390/1-A	Method Blank	89	64	80	77	80	80	84	73

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB156L	156157L	PCB157L	PCB167L	PCB169L	PCB188L	PCB189L	PCB202L
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)	(25-150)
885-7077-1	RG-North20240626	96	96	96	93	96	55	73	65
885-7077-2	RG-South20240627	96	96	96	94	95	53	64	60
MB 320-777390/1-A	Method Blank	107	107	107	106	110	58	70	61

		Percent Isotope Dilution Recovery (Acceptance Limits)			
		PCB205L	PCB206L	PCB208L	PCB209L
Lab Sample ID	Client Sample ID	(25-150)	(25-150)	(25-150)	(25-150)
885-7077-1	RG-North20240626	79	74	65	71
885-7077-2	RG-South20240627	72	62	63	70
MB 320-777390/1-A	Method Blank	75	65	60	62

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L

Isotope Dilution Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
PCB114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
156157L = PCB-156L/157L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB1L	PCB3L	PCB4L	PCB15L	PCB19L	PCB37L	PCB54L	PCB77L
Lab Sample ID	Client Sample ID	(15-140)	(15-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-777390/2-A	Lab Control Sample	74	75	70	81	79	79	69	89
LCSD 320-777390/3-A	Lab Control Sample Dup	74	77	69	83	81	80	69	92

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB81L	PCB104L	PCB105L	PCB114L	PCB118L	PCB123L	PCB126L	PCB155L
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-777390/2-A	Lab Control Sample	88	68	84	83	82	83	87	81
LCSD 320-777390/3-A	Lab Control Sample Dup	91	67	86	86	88	85	89	70

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB156L	156157L	PCB157L	PCB167L	PCB169L	PCB188L	PCB189L	PCB202L
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)	(30-140)
LCS 320-777390/2-A	Lab Control Sample	110	110	110	112	114	60	75	65
LCSD 320-777390/3-A	Lab Control Sample Dup	104	104	104	104	104	61	76	66

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PCB205L	PCB206L	PCB208L	PCB209L				
Lab Sample ID	Client Sample ID	(30-140)	(30-140)	(30-140)	(30-140)				
LCS 320-777390/2-A	Lab Control Sample	77	67	65	68				
LCSD 320-777390/3-A	Lab Control Sample Dup	77	70	63	68				

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L

Isotope Dilution Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job ID: 885-7077-1

Project/Site: CMC

PCB104L = PCB-104L
PCB105L = PCB-105L
PCB114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
156157L = PCB-156L/157L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

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

Lab Sample ID: MB 860-169234/9
Matrix: Water
Analysis Batch: 169234

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	ND		0.010	0.0018	mg/L			07/02/24 20:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 144*		*07/02/24 20:38*	*1*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*07/02/24 20:38*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 131*		*07/02/24 20:38*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/02/24 20:38*	*1*

Lab Sample ID: LCS 860-169234/3
Matrix: Water
Analysis Batch: 169234

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Tetrahydrofuran			0.100	0.0923		mg/L		92	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 144*
4-Bromofluorobenzene (Surr)	*99*		*74 - 124*
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 860-169234/4
Matrix: Water
Analysis Batch: 169234

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
Tetrahydrofuran			0.100	0.0984		mg/L		98	75 - 125	6	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 144*
4-Bromofluorobenzene (Surr)	*100*		*74 - 124*
Dibromofluoromethane (Surr)	*97*		*75 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 608.3 - Organochlorine Pesticides/PCBs in Water

Lab Sample ID: MB 860-169312/1-A
Matrix: Water
Analysis Batch: 169369

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 169312

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		0.000050	0.000017	mg/L		07/02/24 22:40	07/03/24 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*55*		*45 - 115*	*07/02/24 22:40*	*07/03/24 11:25*	*1*
Tetrachloro-m-xylene	*107*		*41 - 110*	*07/02/24 22:40*	*07/03/24 11:25*	*1*

Method: 608.3 - Organochlorine Pesticides/PCBs in Water (Continued)

Lab Sample ID: LCS 860-169312/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169369
Prep Batch: 169312

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dieldrin			0.00125	0.00150	*+	mg/L		120	57 - 107		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*56*		*45 - 115*
Tetrachloro-m-xylene	*101*		*41 - 110*

Lab Sample ID: LCSD 860-169312/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169369
Prep Batch: 169312

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dieldrin			0.00125	0.00149	*+	mg/L		119	57 - 107	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*56*		*45 - 115*
Tetrachloro-m-xylene	*99*		*41 - 110*

Lab Sample ID: MB 860-169818/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169920
Prep Batch: 169818

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		0.000050	0.000017	mg/L		07/05/24 21:47	07/13/24 11:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*45 - 115*	*07/05/24 21:47*	*07/13/24 11:39*	*1*
Tetrachloro-m-xylene	*129*	*S1+*	*41 - 110*	*07/05/24 21:47*	*07/13/24 11:39*	*1*

Lab Sample ID: LCS 860-169818/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169920
Prep Batch: 169818

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dieldrin			0.00125	0.00186	*+	mg/L		149	57 - 107		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*91*		*45 - 115*
Tetrachloro-m-xylene	*124*	*S1+*	*41 - 110*

Lab Sample ID: LCSD 860-169818/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 169920
Prep Batch: 169818

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dieldrin			0.00125	0.00187	*+	mg/L		150	57 - 107	0	30

Method: 608.3 - Organochlorine Pesticides/PCBs in Water (Continued)

Lab Sample ID: LCSD 860-169818/3-A
Matrix: Water
Analysis Batch: 169920

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 169818

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*91*		*45 - 115*
Tetrachloro-m-xylene	*124*	*S1+*	*41 - 110*

Method: 8081B_LL - Organochlorine Pesticides (GC)

Lab Sample ID: MB 860-169461/1-A
Matrix: Water
Analysis Batch: 169649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 169461

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	ND		0.000010	0.00000081	mg/L		07/03/24 13:50	07/05/24 10:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*141*	*S1+*	*15 - 136*	*07/03/24 13:50*	*07/05/24 10:04*	*1*
Tetrachloro-m-xylene	*125*		*18 - 126*	*07/03/24 13:50*	*07/05/24 10:04*	*1*

Lab Sample ID: LCS 860-169461/2-A
Matrix: Water
Analysis Batch: 169649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 169461

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dieldrin			0.000100	0.000132	*+	mg/L		132	46 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*139*	*S1+*	*15 - 136*
Tetrachloro-m-xylene	*123*		*18 - 126*

Lab Sample ID: LCSD 860-169461/3-A
Matrix: Water
Analysis Batch: 169649

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 169461

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dieldrin			0.000100	0.000139	*+	mg/L		139	46 - 127	5	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*146*	*S1+*	*15 - 136*
Tetrachloro-m-xylene	*122*		*18 - 126*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-7687/10
Matrix: Water
Analysis Batch: 7687

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate	ND		0.10	0.020	mg/L			06/28/24 10:22	1
Nitrite	ND		0.10	0.012	mg/L			06/28/24 10:22	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-7687/58
Matrix: Water
Analysis Batch: 7687

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate	ND		0.10	0.020	mg/L			06/28/24 20:19	1
Nitrite	ND		0.10	0.012	mg/L			06/28/24 20:19	1

Lab Sample ID: LCS 885-7687/11
Matrix: Water
Analysis Batch: 7687

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate	2.50	2.58		mg/L		103	90 - 110
Nitrite	1.00	0.986		mg/L		99	90 - 110

Lab Sample ID: LCS 885-7687/59
Matrix: Water
Analysis Batch: 7687

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate	2.50	2.54		mg/L		102	90 - 110
Nitrite	1.00	0.969		mg/L		97	90 - 110

Lab Sample ID: MRL 885-7687/9
Matrix: Water
Analysis Batch: 7687

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate	0.100	0.111		mg/L		111	50 - 150
Nitrite	0.0999	0.103		mg/L		103	50 - 150

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 320-779486/1-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoropentanoic acid (PFPeA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 320-779486/1-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.50	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		20	5.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		20	5.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		8.0	2.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		4.0	1.0	ng/L		07/15/24 11:26	07/16/24 18:11	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		10	2.5	ng/L		07/15/24 11:26	07/16/24 18:11	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		50	13	ng/L		07/15/24 11:26	07/16/24 18:11	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		50	13	ng/L		07/15/24 11:26	07/16/24 18:11	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*5 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C5 PFPeA	*107*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C5 PFHxA	*102*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C4 PFHpA	*117*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C8 PFOA	*102*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*
13C9 PFNA	*103*		*40 - 130*	*07/15/24 11:26*	*07/16/24 18:11*	*1*

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 320-779486/1-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779486

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C6 PFDA	106		40 - 130	07/15/24 11:26	07/16/24 18:11	1
13C7 PFUnA	119		30 - 130	07/15/24 11:26	07/16/24 18:11	1
13C2 PFDoA	123		10 - 130	07/15/24 11:26	07/16/24 18:11	1
13C2 PFTeDA	111		10 - 130	07/15/24 11:26	07/16/24 18:11	1
13C3 PFHxS	93.5		40 - 130	07/15/24 11:26	07/16/24 18:11	1
13C8 PFOS	100		40 - 130	07/15/24 11:26	07/16/24 18:11	1
13C8 PFOSA	101		40 - 130	07/15/24 11:26	07/16/24 18:11	1
d3-NMeFOSAA	101		40 - 170	07/15/24 11:26	07/16/24 18:11	1
d5-NEtFOSAA	104		25 - 135	07/15/24 11:26	07/16/24 18:11	1
13C2 4:2 FTS	91.6		40 - 200	07/15/24 11:26	07/16/24 18:11	1
13C2 6:2 FTS	115		40 - 200	07/15/24 11:26	07/16/24 18:11	1
13C2 8:2 FTS	96.6		40 - 300	07/15/24 11:26	07/16/24 18:11	1
13C3 HFPO-DA	96.7		40 - 130	07/15/24 11:26	07/16/24 18:11	1
d7-N-MeFOSE-M	92.3		10 - 130	07/15/24 11:26	07/16/24 18:11	1
d9-N-EtFOSE-M	94.4		10 - 130	07/15/24 11:26	07/16/24 18:11	1
d5-NEtPFOSA	87.2		10 - 130	07/15/24 11:26	07/16/24 18:11	1
d3-NMePFOSA	86.3		10 - 130	07/15/24 11:26	07/16/24 18:11	1

Lab Sample ID: LCS 320-779486/3-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	128	123		ng/L		96	70 - 140
Perfluoropentanoic acid (PFPeA)	64.0	58.8		ng/L		92	65 - 135
Perfluorohexanoic acid (PFHxA)	32.0	29.1		ng/L		91	70 - 145
Perfluoroheptanoic acid (PFHpA)	32.0	28.4		ng/L		89	70 - 150
Perfluorooctanoic acid (PFOA)	32.0	28.2		ng/L		88	70 - 150
Perfluorononanoic acid (PFNA)	32.0	32.1		ng/L		100	70 - 150
Perfluorodecanoic acid (PFDA)	32.0	35.7		ng/L		111	70 - 140
Perfluoroundecanoic acid (PFUnA)	32.0	29.9		ng/L		93	70 - 145
Perfluorododecanoic acid (PFDoA)	32.0	27.8		ng/L		87	70 - 140
Perfluorotridecanoic acid (PFTrDA)	32.0	32.9		ng/L		103	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	32.0	31.6		ng/L		99	60 - 140
Perfluoropentanesulfonic acid (PFPeS)	30.1	27.3		ng/L		91	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	29.2	30.8		ng/L		105	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	30.5	33.5		ng/L		110	70 - 150
Perfluorooctanesulfonic acid (PFOS)	29.8	28.3		ng/L		95	55 - 150
Perfluorononanesulfonic acid (PFNS)	30.8	28.9		ng/L		94	65 - 145
Perfluorodecanesulfonic acid (PFDS)	30.8	27.2		ng/L		88	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	31.0	24.8		ng/L		80	50 - 145

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-779486/3-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	120	128		ng/L		107	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	122	123		ng/L		101	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	123	134		ng/L		109	60 - 150
Perfluorooctanesulfonamide (PFOSA)	32.0	24.5		ng/L		77	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	32.0	28.8		ng/L		90	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	32.0	29.2		ng/L		91	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	32.0	31.5		ng/L		98	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	32.0	27.6		ng/L		86	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	320	301		ng/L		94	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	320	303		ng/L		95	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	128	119		ng/L		93	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	121	144		ng/L		119	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	64.0	65.0		ng/L		101	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	64.0	56.1		ng/L		88	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	64.0	58.2		ng/L		91	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	120	132		ng/L		111	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	121	136		ng/L		113	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	57.1	52.8		ng/L		92	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	160	161		ng/L		101	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	799	806		ng/L		101	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	799	887		ng/L		111	50 - 145

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*92.1*		*5 - 130*
13C5 PFPeA	*97.5*		*40 - 130*
13C5 PFHxA	*95.3*		*40 - 130*
13C4 PFHpA	*110*		*40 - 130*
13C8 PFOA	*96.2*		*40 - 130*
13C9 PFNA	*87.6*		*40 - 130*
13C6 PFDA	*99.7*		*40 - 130*
13C7 PFUnA	*109*		*30 - 130*

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-779486/3-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2 PFDoA	102		10 - 130
13C2 PFTeDA	88.1		10 - 130
13C3 PFHxS	85.2		40 - 130
13C8 PFOS	89.5		40 - 130
13C8 PFOSA	83.7		40 - 130
d3-NMeFOSAA	94.8		40 - 170
d5-NEtFOSAA	97.4		25 - 135
13C2 4:2 FTS	81.3		40 - 200
13C2 6:2 FTS	98.3		40 - 200
13C2 8:2 FTS	84.9		40 - 300
13C3 HFPO-DA	90.7		40 - 130
d7-N-MeFOSE-M	74.1		10 - 130
d9-N-EtFOSE-M	78.3		10 - 130
d5-NEtPFOSA	75.7		10 - 130
d3-NMePFOSA	74.2		10 - 130

Lab Sample ID: LCSD 320-779486/4-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			128	131		ng/L		102	70 - 140	6	30
Perfluoropentanoic acid (PFPeA)			64.0	63.5		ng/L		99	65 - 135	8	30
Perfluorohexanoic acid (PFHxA)			32.0	31.4		ng/L		98	70 - 145	7	30
Perfluoroheptanoic acid (PFHpA)			32.0	30.1		ng/L		94	70 - 150	6	30
Perfluorooctanoic acid (PFOA)			32.0	29.5		ng/L		92	70 - 150	4	30
Perfluorononanoic acid (PFNA)			32.0	29.3		ng/L		91	70 - 150	9	30
Perfluorodecanoic acid (PFDA)			32.0	32.8		ng/L		102	70 - 140	9	30
Perfluoroundecanoic acid (PFUnA)			32.0	33.5		ng/L		105	70 - 145	11	30
Perfluorododecanoic acid (PFDoA)			32.0	31.5		ng/L		99	70 - 140	13	30
Perfluorotridecanoic acid (PFTrDA)			32.0	35.8		ng/L		112	65 - 140	8	30
Perfluorotetradecanoic acid (PFTeDA)			32.0	34.6		ng/L		108	60 - 140	9	30
Perfluoropentanesulfonic acid (PFPeS)			30.1	29.0		ng/L		96	65 - 140	6	30
Perfluorohexanesulfonic acid (PFHxS)			29.2	33.6		ng/L		115	65 - 145	9	30
Perfluoroheptanesulfonic acid (PFHpS)			30.5	32.4		ng/L		106	70 - 150	3	30
Perfluorooctanesulfonic acid (PFOS)			29.8	29.6		ng/L		99	55 - 150	4	30
Perfluorononanesulfonic acid (PFNS)			30.8	28.9		ng/L		94	65 - 145	0	30
Perfluorodecanesulfonic acid (PFDS)			30.8	27.6		ng/L		90	60 - 145	2	30
Perfluorododecanesulfonic acid (PFDoS)			31.0	27.4		ng/L		88	50 - 145	10	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)			120	139		ng/L		116	70 - 145	8	30

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCSD 320-779486/4-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)			122	128		ng/L		105	65 - 155	4	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)			123	150		ng/L		122	60 - 150	11	30
Perfluorooctanesulfonamide (PFOSA)			32.0	27.0		ng/L		84	70 - 145	10	30
N-methylperfluorooctane sulfonamide (NMeFOSA)			32.0	31.0		ng/L		97	60 - 150	7	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)			32.0	32.3		ng/L		101	65 - 145	10	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			32.0	30.4		ng/L		95	50 - 140	3	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			32.0	29.0		ng/L		91	70 - 145	5	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)			320	321		ng/L		100	70 - 145	6	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)			320	316		ng/L		99	70 - 135	4	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)			128	135		ng/L		105	70 - 140	12	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			121	156		ng/L		129	65 - 145	8	30
Perfluoro-3-methoxypropanoic acid (PFMPA)			64.0	70.2		ng/L		110	55 - 140	8	30
Perfluoro-4-methoxybutanoic acid (PFMBA)			64.0	60.1		ng/L		94	60 - 150	7	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)			64.0	63.6		ng/L		99	50 - 150	9	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			120	137		ng/L		115	70 - 155	3	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			121	146		ng/L		121	55 - 160	7	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			57.1	55.8		ng/L		98	70 - 140	5	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)			160	169		ng/L		106	65 - 130	5	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)			799	851		ng/L		107	70 - 135	5	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)			799	925		ng/L		116	50 - 145	4	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*90.7*		*5 - 130*
13C5 PFPeA	*96.1*		*40 - 130*
13C5 PFHxA	*93.8*		*40 - 130*
13C4 PFHpA	*111*		*40 - 130*
13C8 PFOA	*88.0*		*40 - 130*
13C9 PFNA	*103*		*40 - 130*
13C6 PFDA	*101*		*40 - 130*
13C7 PFUnA	*99.1*		*30 - 130*
13C2 PFDoA	*99.9*		*10 - 130*
13C2 PFTeDA	*86.8*		*10 - 130*

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCSD 320-779486/4-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 779486

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3 PFHxS	83.5		40 - 130
13C8 PFOS	92.0		40 - 130
13C8 PFOSA	88.4		40 - 130
d3-NMeFOSAA	105		40 - 170
d5-NEtFOSAA	103		25 - 135
13C2 4:2 FTS	81.3		40 - 200
13C2 6:2 FTS	97.3		40 - 200
13C2 8:2 FTS	86.6		40 - 300
13C3 HFPO-DA	91.8		40 - 130
d7-N-MeFOSE-M	80.2		10 - 130
d9-N-EtFOSE-M	85.0		10 - 130
d5-NEtPFOSA	78.0		10 - 130
d3-NMePFOSA	76.3		10 - 130

Lab Sample ID: LLCS 320-779486/2-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	12.8	11.9		ng/L		93	70 - 140
Perfluoropentanoic acid (PFPeA)	6.40	5.78		ng/L		90	65 - 135
Perfluorohexanoic acid (PFHxA)	3.20	2.86		ng/L		89	70 - 145
Perfluoroheptanoic acid (PFHpA)	3.20	3.01		ng/L		94	70 - 150
Perfluorooctanoic acid (PFOA)	3.20	2.72		ng/L		85	70 - 150
Perfluorononanoic acid (PFNA)	3.20	3.48		ng/L		109	70 - 150
Perfluorodecanoic acid (PFDA)	3.20	2.99		ng/L		93	70 - 140
Perfluoroundecanoic acid (PFUnA)	3.20	3.09		ng/L		97	70 - 145
Perfluorododecanoic acid (PFDoA)	3.20	2.73		ng/L		85	70 - 140
Perfluorotridecanoic acid (PFTrDA)	3.20	3.56		ng/L		111	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	3.20	3.14		ng/L		98	60 - 140
Perfluoropentanesulfonic acid (PFPeS)	3.01	2.46		ng/L		82	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	2.92	3.02		ng/L		104	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.05	3.07		ng/L		101	70 - 150
Perfluorooctanesulfonic acid (PFOS)	2.98	2.68		ng/L		90	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.08	2.94		ng/L		96	65 - 145
Perfluorodecanesulfonic acid (PFDS)	3.08	2.72		ng/L		88	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.10	2.46		ng/L		79	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	12.0	13.7		ng/L		114	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	12.2	11.9		ng/L		97	65 - 155

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-779486/2-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	12.3	11.9		ng/L		97	60 - 150
Perfluorooctanesulfonamide (PFOSA)	3.20	2.38		ng/L		74	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	3.20	2.63		ng/L		82	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	3.20	2.84		ng/L		89	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	3.20	3.00		ng/L		94	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	3.20	2.44		ng/L		76	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	32.0	28.4		ng/L		89	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	32.0	29.1		ng/L		91	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	12.8	11.5		ng/L		90	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	12.1	13.9		ng/L		115	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	6.40	6.24		ng/L		98	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	6.40	5.41		ng/L		85	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	6.40	5.10		ng/L		80	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	12.0	11.2		ng/L		94	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	12.1	13.3		ng/L		110	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	5.71	4.89		ng/L		86	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	16.0	15.2		ng/L		95	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	79.9	70.5		ng/L		88	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	79.9	85.7		ng/L		107	50 - 145

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*95.3*		*5 - 130*
13C5 PFPeA	*100*		*40 - 130*
13C5 PFHxA	*98.9*		*40 - 130*
13C4 PFHpA	*113*		*40 - 130*
13C8 PFOA	*99.9*		*40 - 130*
13C9 PFNA	*79.9*		*40 - 130*
13C6 PFDA	*91.0*		*40 - 130*
13C7 PFUnA	*84.8*		*30 - 130*
13C2 PFDoA	*85.0*		*10 - 130*
13C2 PFTeDA	*84.0*		*10 - 130*
13C3 PFHxS	*87.2*		*40 - 130*
13C8 PFOS	*98.8*		*40 - 130*

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-779486/2-A
Matrix: Water
Analysis Batch: 780306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C8 PFOSA	99.4		40 - 130
d3-NMeFOSAA	101		40 - 170
d5-NEtFOSAA	103		25 - 135
13C2 4:2 FTS	80.8		40 - 200
13C2 6:2 FTS	106		40 - 200
13C2 8:2 FTS	92.8		40 - 300
13C3 HFPO-DA	92.4		40 - 130
d7-N-MeFOSE-M	89.4		10 - 130
d9-N-EtFOSE-M	91.8		10 - 130
d5-NEtPFOSA	84.5		10 - 130
d3-NMePFOSA	85.9		10 - 130

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA

Lab Sample ID: MB 320-779486/1-A
Matrix: Water
Analysis Batch: 780601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 779486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS) - RA	ND		2.0	0.50	ng/L		07/15/24 11:26	07/17/24 13:53	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS - RA	82.7		40 - 135	07/15/24 11:26	07/17/24 13:53	1

Lab Sample ID: LCS 320-779486/3-A
Matrix: Water
Analysis Batch: 780601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanesulfonic acid (PFBS) - RA			28.4	26.7		ng/L		94	60 - 145		

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C3 PFBS - RA	78.1		40 - 135

Lab Sample ID: LCSD 320-779486/4-A
Matrix: Water
Analysis Batch: 780601

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS) - RA			28.4	28.9		ng/L		102	60 - 145	8	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3 PFBS - RA	75.3		40 - 135

Method: Draft-4 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS - RA (Continued)

Lab Sample ID: LLCS 320-779486/2-A
Matrix: Water
Analysis Batch: 780601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 779486

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorobutanesulfonic acid (PFBS) - RA			2.84	2.50		ng/L		88	60 - 145		

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C3 PFBS - RA	*75.8*		*40 - 135*

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		20	19	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-2	ND		200	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-3	ND		60	48	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-4	ND		40	24	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-5	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-6	ND		200	25	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-7	ND		200	18	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-8	ND		200	26	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-9	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-10	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-11	ND		200	150	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-12	ND		400	31	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-13	ND		400	31	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-14	ND		200	70	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-15	ND		40	21	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-16	ND		200	6.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-17	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-18	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-19	ND		20	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-20	ND		400	21	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-21	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-22	ND		200	7.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-23	ND		200	8.0	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-24	ND		200	9.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-25	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-26	ND		400	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-27	ND		200	9.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-28	ND		400	21	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-29	ND		400	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-30	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-31	ND		200	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-32	ND		200	9.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-33	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-34	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-35	ND		200	8.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-36	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-37	ND		20	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-38	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-39	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-40	ND		400	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-41	ND		200	8.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-42	ND		200	8.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-43	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-44	ND		600	35	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-45	ND		400	7.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-46	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-47	ND		600	35	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-48	ND		200	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-49	ND		400	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-50	ND		400	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-51	ND		400	7.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-52	ND		200	25	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-53	ND		400	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-54	ND		20	8.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-55	ND		200	7.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-56	ND		200	6.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-57	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-58	ND		200	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-59	ND		600	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-60	ND		200	9.5	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-61	ND		800	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-62	ND		600	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-63	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-64	ND		200	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-65	ND		600	35	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-66	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-67	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-68	ND		200	9.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-69	ND		400	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-70	ND		800	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-71	ND		400	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-72	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-73	ND		200	5.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-74	ND		800	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-75	ND		600	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-76	ND		800	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-77	ND		20	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-78	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-79	ND		200	8.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-80	ND		200	8.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-81	ND		20	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-82	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-83	ND		400	9.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-84	ND		200	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-85	ND		600	16	pg/L		07/08/24 12:40	07/12/24 01:41	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-86	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-87	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-88	ND		400	8.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-89	ND		200	8.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-90	ND		600	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-91	ND		400	8.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-92	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-93	ND		400	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-94	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-95	ND		200	31	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-96	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-97	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-98	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-99	ND		400	8.0	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-100	ND		400	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-101	ND		600	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-102	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-103	ND		200	8.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-104	ND		20	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-105	ND		20	9.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-106	ND		200	8.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-107	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-108	ND		400	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-109	ND		1200	5.0	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-110	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-111	ND		200	8.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-112	ND		200	6.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-113	ND		600	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-114	ND		20	7.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-115	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-116	ND		600	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-117	ND		600	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-118	ND		20	8.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-119	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-120	ND		200	5.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-121	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-122	ND		200	8.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-123	ND		20	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-124	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-125	ND		1200	29	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-126	ND		20	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-127	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-128	ND		400	9.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-129	ND		800	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-130	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-131	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-132	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-133	ND		200	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-134	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-135	ND		400	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-136	ND		200	6.1	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-137	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-138	ND		800	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-139	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-140	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-141	ND		200	7.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-142	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-143	ND		400	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-144	ND		200	6.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-145	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-146	ND		200	7.2	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-147	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-148	ND		200	6.6	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-149	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-150	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-151	ND		400	9.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-152	ND		200	5.5	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-153	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-154	ND		200	5.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-155	ND		20	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-156	ND		40	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-157	ND		40	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-158	ND		200	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-159	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-160	ND		800	7.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-161	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-162	ND		200	9.0	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-163	ND		800	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-164	ND		200	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-165	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-166	ND		400	9.9	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-167	ND		20	7.7	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-168	ND		400	9.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-169	ND		20	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-170	ND		200	19	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-171	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-172	ND		200	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-173	ND		400	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-174	ND		200	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-175	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-176	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-177	ND		200	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-178	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-179	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-180	ND		400	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-181	ND		200	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-182	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-183	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-184	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-185	ND		200	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-186	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-187	ND		200	19	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-188	ND		20	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-189	ND		20	16	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-190	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-191	ND		200	20	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-192	ND		200	17	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-193	ND		400	10	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-194	ND		200	8.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-195	ND		200	18	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-196	ND		200	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-197	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-198	ND		400	7.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-199	ND		400	7.8	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-200	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-201	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-202	ND		20	11	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-203	ND		200	14	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-204	ND		200	13	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-205	ND		20	15	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-206	ND		20	8.3	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-207	ND		200	5.4	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-208	ND		20	12	pg/L		07/08/24 12:40	07/12/24 01:41	1
PCB-209	ND		20	11	pg/L		07/08/24 12:40	07/12/24 01:41	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
PCB-1L	*74*		*15 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-3L	*75*		*15 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-4L	*68*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-15L	*80*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-19L	*79*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-37L	*77*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-54L	*68*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-77L	*88*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-81L	*89*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-104L	*64*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-105L	*80*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-114L	*77*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-118L	*80*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-123L	*80*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-126L	*84*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-155L	*73*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-156L	*107*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-156L/157L	*107*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-157L	*107*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-167L	*106*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*
PCB-169L	*110*		*25 - 150*	*07/08/24 12:40*	*07/12/24 01:41*	*1*

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-777390/1-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 777390

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-188L	58		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-189L	70		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-202L	61		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-205L	75		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-206L	65		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-208L	60		25 - 150	07/08/24 12:40	07/12/24 01:41	1
PCB-209L	62		25 - 150	07/08/24 12:40	07/12/24 01:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	80		30 - 135	07/08/24 12:40	07/12/24 01:41	1
PCB-111L	85		30 - 135	07/08/24 12:40	07/12/24 01:41	1
PCB-178L	98		30 - 135	07/08/24 12:40	07/12/24 01:41	1

Lab Sample ID: LCS 320-777390/2-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 777390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1	2000	1870		pg/L		94	50 - 150
PCB-3	2000	1860		pg/L		93	50 - 150
PCB-4	2000	1830		pg/L		91	50 - 150
PCB-15	2000	1710		pg/L		85	50 - 150
PCB-19	2000	1800		pg/L		90	50 - 150
PCB-37	2000	1970		pg/L		98	50 - 150
PCB-54	2000	1790		pg/L		90	50 - 150
PCB-77	2000	1900		pg/L		95	50 - 150
PCB-81	2000	1980		pg/L		99	50 - 150
PCB-104	2000	2340		pg/L		117	50 - 150
PCB-105	2000	1810		pg/L		90	50 - 150
PCB-114	2000	2250		pg/L		113	50 - 150
PCB-118	2000	2020		pg/L		101	50 - 150
PCB-123	2000	2200		pg/L		110	50 - 150
PCB-126	2000	2130		pg/L		106	50 - 150
PCB-155	2000	2520		pg/L		126	50 - 150
PCB-156	4000	3770		pg/L		94	50 - 150
PCB-157	4000	3770		pg/L		94	50 - 150
PCB-167	2000	1930		pg/L		96	50 - 150
PCB-169	2000	1860		pg/L		93	50 - 150
PCB-188	2000	1870		pg/L		94	50 - 150
PCB-189	2000	1910		pg/L		96	50 - 150
PCB-202	2000	1960		pg/L		98	50 - 150
PCB-205	2000	1990		pg/L		100	50 - 150
PCB-206	2000	1830		pg/L		92	50 - 150
PCB-208	2000	2010		pg/L		100	50 - 150
PCB-209	2000	1780		pg/L		89	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	74		15 - 140

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-777390/2-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 777390

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-3L	75		15 - 140
PCB-4L	70		30 - 140
PCB-15L	81		30 - 140
PCB-19L	79		30 - 140
PCB-37L	79		30 - 140
PCB-54L	69		30 - 140
PCB-77L	89		30 - 140
PCB-81L	88		30 - 140
PCB-104L	68		30 - 140
PCB-105L	84		30 - 140
PCB-114L	83		30 - 140
PCB-118L	82		30 - 140
PCB-123L	83		30 - 140
PCB-126L	87		30 - 140
PCB-155L	81		30 - 140
PCB-156L	110		30 - 140
PCB-156L/157L	110		30 - 140
PCB-157L	110		30 - 140
PCB-167L	112		30 - 140
PCB-169L	114		30 - 140
PCB-188L	60		30 - 140
PCB-189L	75		30 - 140
PCB-202L	65		30 - 140
PCB-205L	77		30 - 140
PCB-206L	67		30 - 140
PCB-208L	65		30 - 140
PCB-209L	68		30 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	80		40 - 125
PCB-111L	82		40 - 125
PCB-178L	91		40 - 125

Lab Sample ID: LCSD 320-777390/3-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 777390

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1			2000	1890		pg/L		94	50 - 150	1	50
PCB-3			2000	1830		pg/L		91	50 - 150	2	50
PCB-4			2000	1900		pg/L		95	50 - 150	4	50
PCB-15			2000	1680		pg/L		84	50 - 150	1	50
PCB-19			2000	1800		pg/L		90	50 - 150	0	50
PCB-37			2000	1950		pg/L		98	50 - 150	1	50
PCB-54			2000	1880		pg/L		94	50 - 150	4	50
PCB-77			2000	1880		pg/L		94	50 - 150	1	50
PCB-81			2000	2070		pg/L		103	50 - 150	4	50
PCB-104			2000	2370		pg/L		118	50 - 150	1	50

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-777390/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 778376
Prep Batch: 777390

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-105			2000	1860		pg/L		93	50 - 150	3	50
PCB-114			2000	2140		pg/L		107	50 - 150	5	50
PCB-118			2000	1920		pg/L		96	50 - 150	5	50
PCB-123			2000	2170		pg/L		108	50 - 150	1	50
PCB-126			2000	2080		pg/L		104	50 - 150	2	50
PCB-155			2000	2640		pg/L		132	50 - 150	5	50
PCB-156			4000	3740		pg/L		94	50 - 150	1	50
PCB-157			4000	3740		pg/L		94	50 - 150	1	50
PCB-167			2000	1900		pg/L		95	50 - 150	2	50
PCB-169			2000	1950		pg/L		97	50 - 150	5	50
PCB-188			2000	1910		pg/L		95	50 - 150	2	50
PCB-189			2000	1910		pg/L		96	50 - 150	0	50
PCB-202			2000	1970		pg/L		98	50 - 150	0	50
PCB-205			2000	2080		pg/L		104	50 - 150	4	50
PCB-206			2000	1730		pg/L		87	50 - 150	5	50
PCB-208			2000	2020		pg/L		101	50 - 150	1	50
PCB-209			2000	1800		pg/L		90	50 - 150	1	50

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
PCB-1L	*74*		*15 - 140*
PCB-3L	*77*		*15 - 140*
PCB-4L	*69*		*30 - 140*
PCB-15L	*83*		*30 - 140*
PCB-19L	*81*		*30 - 140*
PCB-37L	*80*		*30 - 140*
PCB-54L	*69*		*30 - 140*
PCB-77L	*92*		*30 - 140*
PCB-81L	*91*		*30 - 140*
PCB-104L	*67*		*30 - 140*
PCB-105L	*86*		*30 - 140*
PCB-114L	*86*		*30 - 140*
PCB-118L	*88*		*30 - 140*
PCB-123L	*85*		*30 - 140*
PCB-126L	*89*		*30 - 140*
PCB-155L	*70*		*30 - 140*
PCB-156L	*104*		*30 - 140*
PCB-156L/157L	*104*		*30 - 140*
PCB-157L	*104*		*30 - 140*
PCB-167L	*104*		*30 - 140*
PCB-169L	*104*		*30 - 140*
PCB-188L	*61*		*30 - 140*
PCB-189L	*76*		*30 - 140*
PCB-202L	*66*		*30 - 140*
PCB-205L	*77*		*30 - 140*
PCB-206L	*70*		*30 - 140*
PCB-208L	*63*		*30 - 140*
PCB-209L	*68*		*30 - 140*

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-777390/3-A
Matrix: Water
Analysis Batch: 778376

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 777390

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
PCB-28L	*79*		*40 - 125*
PCB-111L	*83*		*40 - 125*
PCB-178L	*91*		*40 - 125*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MRL 885-8057/14
Matrix: Water
Analysis Batch: 8057

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.515	J	mg/L		103	50 - 150
Magnesium	0.500	0.520	J	mg/L		104	50 - 150

Lab Sample ID: MRL 885-8191/13
Matrix: Water
Analysis Batch: 8191

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.548	J	mg/L		110	50 - 150
Magnesium	0.500	0.560	J	mg/L		112	50 - 150

Lab Sample ID: MB 885-7782/1-A
Matrix: Water
Analysis Batch: 8057

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 7782

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.0	0.053	mg/L		07/02/24 13:43	07/08/24 09:51	1
Magnesium	ND		1.0	0.033	mg/L		07/02/24 13:43	07/08/24 09:51	1

Lab Sample ID: LCS 885-7782/6-A
Matrix: Water
Analysis Batch: 8057

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 7782

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50.0	52.5		mg/L		105	85 - 115
Magnesium	50.0	51.7		mg/L		103	85 - 115

Lab Sample ID: LLCS 885-7782/5-A
Matrix: Water
Analysis Batch: 8057

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 7782

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.524	J	mg/L		105	50 - 150
Magnesium	0.500	0.511	J	mg/L		102	50 - 150

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 160-670850/1-A
Matrix: Water
Analysis Batch: 671639

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 670850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND		1.0	0.15	ug/L		07/16/24 15:34	07/19/24 14:22	2

Lab Sample ID: LCS 160-670850/2-A
Matrix: Water
Analysis Batch: 671639

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1000	963		ug/L		96	85 - 115

Lab Sample ID: 885-7077-1 MS
Matrix: Water
Analysis Batch: 671639

Client Sample ID: RG-North20240626
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1.5		1000	993		ug/L		99	70 - 130

Lab Sample ID: 885-7077-1 MSD
Matrix: Water
Analysis Batch: 671639

Client Sample ID: RG-North20240626
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	1.5		1000	994		ug/L		99	70 - 130	0	20

Lab Sample ID: 885-7077-2 MS
Matrix: Water
Analysis Batch: 671639

Client Sample ID: RG-South20240627
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Uranium	1.6		1000	1020		ug/L		101	70 - 130

Lab Sample ID: 885-7077-2 MSD
Matrix: Water
Analysis Batch: 671639

Client Sample ID: RG-South20240627
Prep Type: Total/NA
Prep Batch: 670850

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Uranium	1.6		1000	1010		ug/L		100	70 - 130	1	20

Lab Sample ID: MB 885-8085/19
Matrix: Water
Analysis Batch: 8085

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.00050	0.00012	mg/L			07/09/24 09:56	1
Lead	ND		0.00050	0.000083	mg/L			07/09/24 09:56	1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 885-8085/20
Matrix: Water
Analysis Batch: 8085

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.0250	0.0242		mg/L		97	85 - 115
Lead	0.0125	0.0125		mg/L		100	85 - 115

Lab Sample ID: MRL 885-8085/17
Matrix: Water
Analysis Batch: 8085

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.000500	0.000507		mg/L		101	50 - 150

Lab Sample ID: MRL 885-8085/18
Matrix: Water
Analysis Batch: 8085

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.000500	0.000476	J	mg/L		95	50 - 150

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 885-7985/1
Matrix: Water
Analysis Batch: 7985

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0	4.5	mg/L			07/08/24 09:19	1

Lab Sample ID: LCS 885-7985/2
Matrix: Water
Analysis Batch: 7985

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.0	33.2		mg/L		83	78 - 114

Lab Sample ID: LCSD 885-7985/3
Matrix: Water
Analysis Batch: 7985

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
HEM (Oil & Grease)	40.0	36.2		mg/L		91	78 - 114	9	20

Method: 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 885-7815/1
Matrix: Water
Analysis Batch: 7815

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		50	25	mg/L			07/02/24 14:21	1

Method: 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 885-7815/2
Matrix: Water
Analysis Batch: 7815

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1020		mg/L		102	80 - 120

Lab Sample ID: MB 885-7881/1
Matrix: Water
Analysis Batch: 7881

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		50	25	mg/L			07/03/24 12:52	1

Lab Sample ID: LCS 885-7881/2
Matrix: Water
Analysis Batch: 7881

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	999		mg/L		100	80 - 120

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 885-8010/3-A
Matrix: Water
Analysis Batch: 8585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	ND		0.50	0.50	mg/L		07/08/24 11:40	07/09/24 12:26	1

Lab Sample ID: LCS 885-8010/5-A
Matrix: Water
Analysis Batch: 8585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Total Kjeldahl	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: LLCS 885-8010/4-A
Matrix: Water
Analysis Batch: 8585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8010

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrogen, Total Kjeldahl	0.500	0.623		mg/L		125	50 - 150

Method: 365.1 - Phosphorus, Total

Lab Sample ID: MB 885-8218/1-A
Matrix: Water
Analysis Batch: 8500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 8218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	ND		0.050	0.050	mg/L		07/11/24 08:30	07/16/24 09:23	1

Method: 365.1 - Phosphorus, Total (Continued)

Lab Sample ID: LCS 885-8218/2-A
Matrix: Water
Analysis Batch: 8500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.250	0.239		mg/L		95	90 - 110

Lab Sample ID: MRL 885-8218/7-A
Matrix: Water
Analysis Batch: 8500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 8218

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Phosphorus as P	0.0500	0.0529		mg/L		106	50 - 150

Method: 5220D - COD

Lab Sample ID: MB 885-8084/4
Matrix: Water
Analysis Batch: 8084

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		50	50	mg/L			07/09/24 14:14	1

Lab Sample ID: LCS 885-8084/5
Matrix: Water
Analysis Batch: 8084

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	500	511		mg/L		102	90 - 110

Lab Sample ID: MRL 885-8084/6
Matrix: Water
Analysis Batch: 8084

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	50.0	62.6		mg/L		125	50 - 150

Lab Sample ID: MB 885-9076/4
Matrix: Water
Analysis Batch: 9076

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		50	50	mg/L			07/23/24 14:19	1

Lab Sample ID: LCS 885-9076/5
Matrix: Water
Analysis Batch: 9076

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	500	520		mg/L		104	90 - 110

Method: 5220D - COD (Continued)

Lab Sample ID: MRL 885-9076/6
Matrix: Water
Analysis Batch: 9076

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	50.0	60.5		mg/L		121	50 - 150

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 885-7827/1
Matrix: Water
Analysis Batch: 7827

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		4.0	4.0	mg/L			07/02/24 16:35	1

Lab Sample ID: LCSSRM 885-7827/2
Matrix: Water
Analysis Batch: 7827

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	100	104		mg/L		104.0	77.1 - 110.0

Method: SM 4500 H+ B - pH

Lab Sample ID: 885-7077-2 DU
Matrix: Water
Analysis Batch: 8154

Client Sample ID: RG-South20240627
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.2	HF	8.2		SU		0	20

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 885-7579/1
Matrix: Water
Analysis Batch: 7579

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND	*-	2.0	2.0	mg/L			06/28/24 11:05	1

Lab Sample ID: LCS 885-7579/2
Matrix: Water
Analysis Batch: 7579

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	198	136	*-	mg/L		69	85 - 115

Method: 900.0 - Gross Alpha and Gross Beta Radioactivity

Lab Sample ID: MB 160-669229/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 671234
Prep Batch: 669229

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Gross Alpha	0.05317	U	0.636	0.636	3.00	1.19	pCi/L	07/03/24 08:58	07/18/24 17:23	1
Gross Beta	0.3346	U	0.541	0.542	4.00	0.910	pCi/L	07/03/24 08:58	07/18/24 17:23	1

Lab Sample ID: LCS 160-669229/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 671234
Prep Batch: 669229

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Alpha	49.5	51.70		7.58	3.00	1.87	pCi/L	104	75 - 125

Lab Sample ID: LCSB 160-669229/3-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 671234
Prep Batch: 669229

Analyte	Spike Added	LCSB Result	LCSB Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Beta	71.2	68.60		7.38	4.00	0.769	pCi/L	96	75 - 125

Lab Sample ID: 885-7077-2 MS
Client Sample ID: RG-South20240627
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 671234
Prep Batch: 669229

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Alpha	4.84	G	109	112.0		16.8	3.00	5.42	pCi/L	98	60 - 140

Lab Sample ID: 885-7077-2 MSBT
Client Sample ID: RG-South20240627
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 671234
Prep Batch: 669229

Analyte	Sample Result	Sample Qual	Spike Added	MSBT Result	MSBT Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Gross Beta	7.45		156	165.5		17.7	4.00	2.22	pCi/L	101	60 - 140

Lab Sample ID: 885-7077-2 DU
Client Sample ID: RG-South20240627
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 671234
Prep Batch: 669229

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Gross Alpha	4.84	G	3.147	U G	3.06	3.00	4.81	pCi/L	0.27	1
Gross Beta	7.45		8.810		2.12	4.00	2.25	pCi/L	0.34	1

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Method: 9223B - Coliforms, Total, and E.Coll (Colilert - Quanti Tray)

Lab Sample ID: MB 885-7536/1
Matrix: Water
Analysis Batch: 7536

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Escherichia coli	ND		1.0	1.0	MPN/100mL			06/27/24 17:12	1

GC/MS VOA

Analysis Batch: 169234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	624.1	
885-7077-2	RG-South20240627	Total/NA	Water	624.1	
MB 860-169234/9	Method Blank	Total/NA	Water	624.1	
LCS 860-169234/3	Lab Control Sample	Total/NA	Water	624.1	
LCSD 860-169234/4	Lab Control Sample Dup	Total/NA	Water	624.1	

GC/MS Semi VOA

Prep Batch: 169191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	3511	
885-7077-2	RG-South20240627	Total/NA	Water	3511	

Analysis Batch: 169359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	625.1	169191

Analysis Batch: 169694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-2	RG-South20240627	Total/NA	Water	625.1	169191

GC Semi VOA

Prep Batch: 169312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	3511	
885-7077-2	RG-South20240627	Total/NA	Water	3511	
MB 860-169312/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-169312/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-169312/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 169369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	608.3	169312
885-7077-2	RG-South20240627	Total/NA	Water	608.3	169312
MB 860-169312/1-A	Method Blank	Total/NA	Water	608.3	169312
LCS 860-169312/2-A	Lab Control Sample	Total/NA	Water	608.3	169312
LCSD 860-169312/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	169312

Prep Batch: 169461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	3510C	
885-7077-2	RG-South20240627	Total/NA	Water	3510C	
MB 860-169461/1-A	Method Blank	Total/NA	Water	3510C	
LCS 860-169461/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 860-169461/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 169649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	8081B_LL	169461
885-7077-2	RG-South20240627	Total/NA	Water	8081B_LL	169461
MB 860-169461/1-A	Method Blank	Total/NA	Water	8081B_LL	169461

GC Semi VOA (Continued)

Analysis Batch: 169649 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 860-169461/2-A	Lab Control Sample	Total/NA	Water	8081B_LL	169461
LCSD 860-169461/3-A	Lab Control Sample Dup	Total/NA	Water	8081B_LL	169461

Prep Batch: 169818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	3511	
885-7077-2	RG-South20240627	Total/NA	Water	3511	
MB 860-169818/1-A	Method Blank	Total/NA	Water	3511	
LCS 860-169818/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 860-169818/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 169920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-169818/1-A	Method Blank	Total/NA	Water	608.3	169818
LCS 860-169818/2-A	Lab Control Sample	Total/NA	Water	608.3	169818
LCSD 860-169818/3-A	Lab Control Sample Dup	Total/NA	Water	608.3	169818

Analysis Batch: 170091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	608.3	169818
885-7077-2	RG-South20240627	Total/NA	Water	608.3	169818

HPLC/IC

Analysis Batch: 7687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	300.0	
885-7077-2	RG-South20240627	Total/NA	Water	300.0	
MB 885-7687/10	Method Blank	Total/NA	Water	300.0	
MB 885-7687/58	Method Blank	Total/NA	Water	300.0	
LCS 885-7687/11	Lab Control Sample	Total/NA	Water	300.0	
LCS 885-7687/59	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-7687/9	Lab Control Sample	Total/NA	Water	300.0	

LCMS

Prep Batch: 779486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	1633	
885-7077-1 - RA	RG-North20240626	Total/NA	Water	1633	
885-7077-2	RG-South20240627	Total/NA	Water	1633	
885-7077-2 - RA	RG-South20240627	Total/NA	Water	1633	
885-7077-3 - RA	EB-20240627	Total/NA	Water	1633	
885-7077-3	EB-20240627	Total/NA	Water	1633	
MB 320-779486/1-A	Method Blank	Total/NA	Water	1633	
MB 320-779486/1-A - RA	Method Blank	Total/NA	Water	1633	
LCS 320-779486/3-A - RA	Lab Control Sample	Total/NA	Water	1633	
LCS 320-779486/3-A	Lab Control Sample	Total/NA	Water	1633	
LCSD 320-779486/4-A - RA	Lab Control Sample Dup	Total/NA	Water	1633	
LCSD 320-779486/4-A	Lab Control Sample Dup	Total/NA	Water	1633	
LLCS 320-779486/2-A - RA	Lab Control Sample	Total/NA	Water	1633	
LLCS 320-779486/2-A	Lab Control Sample	Total/NA	Water	1633	

LCMS

Analysis Batch: 780306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	Draft-4 1633	779486
885-7077-2	RG-South20240627	Total/NA	Water	Draft-4 1633	779486
885-7077-3	EB-20240627	Total/NA	Water	Draft-4 1633	779486
MB 320-779486/1-A	Method Blank	Total/NA	Water	Draft-4 1633	779486
LCS 320-779486/3-A	Lab Control Sample	Total/NA	Water	Draft-4 1633	779486
LCSD 320-779486/4-A	Lab Control Sample Dup	Total/NA	Water	Draft-4 1633	779486
LLCS 320-779486/2-A	Lab Control Sample	Total/NA	Water	Draft-4 1633	779486

Analysis Batch: 780601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1 - RA	RG-North20240626	Total/NA	Water	Draft-4 1633	779486
885-7077-2 - RA	RG-South20240627	Total/NA	Water	Draft-4 1633	779486
885-7077-3 - RA	EB-20240627	Total/NA	Water	Draft-4 1633	779486
MB 320-779486/1-A - RA	Method Blank	Total/NA	Water	Draft-4 1633	779486
LCS 320-779486/3-A - RA	Lab Control Sample	Total/NA	Water	Draft-4 1633	779486
LCSD 320-779486/4-A - RA	Lab Control Sample Dup	Total/NA	Water	Draft-4 1633	779486
LLCS 320-779486/2-A - RA	Lab Control Sample	Total/NA	Water	Draft-4 1633	779486

Specialty Organics

Prep Batch: 777390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	HRMS-Sep	
885-7077-2	RG-South20240627	Total/NA	Water	HRMS-Sep	
MB 320-777390/1-A	Method Blank	Total/NA	Water	HRMS-Sep	
LCS 320-777390/2-A	Lab Control Sample	Total/NA	Water	HRMS-Sep	
LCSD 320-777390/3-A	Lab Control Sample Dup	Total/NA	Water	HRMS-Sep	

Analysis Batch: 778376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	1668A	777390
885-7077-2	RG-South20240627	Total/NA	Water	1668A	777390
MB 320-777390/1-A	Method Blank	Total/NA	Water	1668A	777390
LCS 320-777390/2-A	Lab Control Sample	Total/NA	Water	1668A	777390
LCSD 320-777390/3-A	Lab Control Sample Dup	Total/NA	Water	1668A	777390

Metals

Prep Batch: 7782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total Recoverable	Water	200.2	
885-7077-2	RG-South20240627	Total Recoverable	Water	200.2	
MB 885-7782/1-A	Method Blank	Total Recoverable	Water	200.2	
LCS 885-7782/6-A	Lab Control Sample	Total Recoverable	Water	200.2	
LLCS 885-7782/5-A	Lab Control Sample	Total Recoverable	Water	200.2	

Analysis Batch: 8057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total Recoverable	Water	200.7 Rev 4.4	7782
885-7077-2	RG-South20240627	Total Recoverable	Water	200.7 Rev 4.4	7782
MB 885-7782/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	7782
LCS 885-7782/6-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	7782

Metals (Continued)

Analysis Batch: 8057 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 885-7782/5-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	7782
MRL 885-8057/14	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	

Analysis Batch: 8085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Dissolved	Water	200.8	
885-7077-2	RG-South20240627	Dissolved	Water	200.8	
MB 885-8085/19	Method Blank	Total/NA	Water	200.8	
LCS 885-8085/20	Lab Control Sample	Total/NA	Water	200.8	
MRL 885-8085/17	Lab Control Sample	Total/NA	Water	200.8	
MRL 885-8085/18	Lab Control Sample	Total/NA	Water	200.8	

Analysis Batch: 8100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total Recoverable	Water	SM 2340B	
885-7077-2	RG-South20240627	Total Recoverable	Water	SM 2340B	

Analysis Batch: 8191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total Recoverable	Water	200.7 Rev 4.4	7782
885-7077-2	RG-South20240627	Total Recoverable	Water	200.7 Rev 4.4	7782
MRL 885-8191/13	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	

Prep Batch: 670850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	200.7/200.8	
885-7077-2	RG-South20240627	Total/NA	Water	200.7/200.8	
MB 160-670850/1-A	Method Blank	Total/NA	Water	200.7/200.8	
LCS 160-670850/2-A	Lab Control Sample	Total/NA	Water	200.7/200.8	
885-7077-1 MS	RG-North20240626	Total/NA	Water	200.7/200.8	
885-7077-1 MSD	RG-North20240626	Total/NA	Water	200.7/200.8	
885-7077-2 MS	RG-South20240627	Total/NA	Water	200.7/200.8	
885-7077-2 MSD	RG-South20240627	Total/NA	Water	200.7/200.8	

Analysis Batch: 671639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	200.8	670850
885-7077-2	RG-South20240627	Total/NA	Water	200.8	670850
MB 160-670850/1-A	Method Blank	Total/NA	Water	200.8	670850
LCS 160-670850/2-A	Lab Control Sample	Total/NA	Water	200.8	670850
885-7077-1 MS	RG-North20240626	Total/NA	Water	200.8	670850
885-7077-1 MSD	RG-North20240626	Total/NA	Water	200.8	670850
885-7077-2 MS	RG-South20240627	Total/NA	Water	200.8	670850
885-7077-2 MSD	RG-South20240627	Total/NA	Water	200.8	670850

General Chemistry

Analysis Batch: 7579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	SM5210B	
885-7077-2	RG-South20240627	Total/NA	Water	SM5210B	

General Chemistry (Continued)

Analysis Batch: 7579 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
USB 885-7579/1	Method Blank	Total/NA	Water	SM5210B	
LCS 885-7579/2	Lab Control Sample	Total/NA	Water	SM5210B	

Analysis Batch: 7815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	2540C	
MB 885-7815/1	Method Blank	Total/NA	Water	2540C	
LCS 885-7815/2	Lab Control Sample	Total/NA	Water	2540C	

Analysis Batch: 7827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	SM 2540D	
885-7077-2	RG-South20240627	Total/NA	Water	SM 2540D	
MB 885-7827/1	Method Blank	Total/NA	Water	SM 2540D	
LCSSRM 885-7827/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 7881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-2	RG-South20240627	Total/NA	Water	2540C	
MB 885-7881/1	Method Blank	Total/NA	Water	2540C	
LCS 885-7881/2	Lab Control Sample	Total/NA	Water	2540C	

Analysis Batch: 7985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	1664B	
885-7077-2	RG-South20240627	Total/NA	Water	1664B	
MB 885-7985/1	Method Blank	Total/NA	Water	1664B	
LCS 885-7985/2	Lab Control Sample	Total/NA	Water	1664B	
LCSD 885-7985/3	Lab Control Sample Dup	Total/NA	Water	1664B	

Prep Batch: 8010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	351.2	
885-7077-2	RG-South20240627	Total/NA	Water	351.2	
MB 885-8010/3-A	Method Blank	Total/NA	Water	351.2	
LCS 885-8010/5-A	Lab Control Sample	Total/NA	Water	351.2	
LLCS 885-8010/4-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 8084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	5220D	
MB 885-8084/4	Method Blank	Total/NA	Water	5220D	
LCS 885-8084/5	Lab Control Sample	Total/NA	Water	5220D	
MRL 885-8084/6	Lab Control Sample	Total/NA	Water	5220D	

Analysis Batch: 8154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	SM 4500 H+ B	
885-7077-2	RG-South20240627	Total/NA	Water	SM 4500 H+ B	
885-7077-2 DU	RG-South20240627	Total/NA	Water	SM 4500 H+ B	

General Chemistry

Prep Batch: 8218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Dissolved	Water	365.2/365.3/365	
885-7077-1	RG-North20240626	Total/NA	Water	365.2/365.3/365	
885-7077-2	RG-South20240627	Dissolved	Water	365.2/365.3/365	
885-7077-2	RG-South20240627	Total/NA	Water	365.2/365.3/365	
MB 885-8218/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	
LCS 885-8218/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MRL 885-8218/7-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 8500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Dissolved	Water	365.1	8218
885-7077-1	RG-North20240626	Total/NA	Water	365.1	8218
885-7077-2	RG-South20240627	Dissolved	Water	365.1	8218
885-7077-2	RG-South20240627	Total/NA	Water	365.1	8218
MB 885-8218/1-A	Method Blank	Total/NA	Water	365.1	8218
LCS 885-8218/2-A	Lab Control Sample	Total/NA	Water	365.1	8218
MRL 885-8218/7-A	Lab Control Sample	Total/NA	Water	365.1	8218

Analysis Batch: 8585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	351.2	8010
885-7077-2	RG-South20240627	Total/NA	Water	351.2	8010
MB 885-8010/3-A	Method Blank	Total/NA	Water	351.2	8010
LCS 885-8010/5-A	Lab Control Sample	Total/NA	Water	351.2	8010
LLCS 885-8010/4-A	Lab Control Sample	Total/NA	Water	351.2	8010

Analysis Batch: 9076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-2	RG-South20240627	Total/NA	Water	5220D	
MB 885-9076/4	Method Blank	Total/NA	Water	5220D	
LCS 885-9076/5	Lab Control Sample	Total/NA	Water	5220D	
MRL 885-9076/6	Lab Control Sample	Total/NA	Water	5220D	

Rad

Prep Batch: 669229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-1	RG-North20240626	Total/NA	Water	Evaporation	
885-7077-2	RG-South20240627	Total/NA	Water	Evaporation	
MB 160-669229/1-A	Method Blank	Total/NA	Water	Evaporation	
LCS 160-669229/2-A	Lab Control Sample	Total/NA	Water	Evaporation	
LCSB 160-669229/3-A	Lab Control Sample	Total/NA	Water	Evaporation	
885-7077-2 MS	RG-South20240627	Total/NA	Water	Evaporation	
885-7077-2 MSBT	RG-South20240627	Total/NA	Water	Evaporation	
885-7077-2 DU	RG-South20240627	Total/NA	Water	Evaporation	

Biology

Analysis Batch: 7536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7077-2	RG-South20240627	Total/NA	Water	9223B	
MB 885-7536/1	Method Blank	Total/NA	Water	9223B	

Lab Chronicle

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-North20240626
Lab Sample ID: 885-7077-1
Date Collected: 06/26/24 15:05
Matrix: Water
Date Received: 06/27/24 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	169234	NA	EET HOU	07/03/24 02:47
Total/NA	Prep	3511			169191	DR	EET HOU	07/02/24 12:40
Total/NA	Analysis	625.1		1	169359	PXS	EET HOU	07/03/24 19:01
Total/NA	Prep	3511			169312	DS	EET HOU	07/02/24 22:42
Total/NA	Analysis	608.3		1	169369	WP	EET HOU	07/03/24 14:47
Total/NA	Prep	3511			169818	DS	EET HOU	07/05/24 21:47
Total/NA	Analysis	608.3		1	170091	WP	EET HOU	07/14/24 13:40
Total/NA	Prep	3510C			169461	BH	EET HOU	07/03/24 13:50
Total/NA	Analysis	8081B_LL		1	169649	WP	EET HOU	07/05/24 11:41
Total/NA	Analysis	300.0		1	7687	JT	EET ALB	06/28/24 11:40
Total/NA	Prep	1633			779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633		1	780306	SS	EET SAC	07/16/24 19:22
Total/NA	Prep	1633	RA		779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633	RA	1	780601	SS	EET SAC	07/17/24 15:03
Total/NA	Prep	HRMS-Sep			777390	BLR	EET SAC	07/08/24 12:40
Total/NA	Analysis	1668A		1	778376	KT	EET SAC	07/12/24 04:49
Total Recoverable	Prep	200.2			7782	TM	EET ALB	07/02/24 13:43
Total Recoverable	Analysis	200.7 Rev 4.4		1	8057	JR	EET ALB	07/08/24 12:07
Total Recoverable	Prep	200.2			7782	TM	EET ALB	07/02/24 13:43
Total Recoverable	Analysis	200.7 Rev 4.4		1	8191	JR	EET ALB	07/10/24 15:01
Dissolved	Analysis	200.8		1	8085	ES	EET ALB	07/09/24 10:31
Total/NA	Prep	200.7/200.8			670850	JSM	EET SL	07/16/24 15:34
Total/NA	Analysis	200.8		2	671639	CGB	EET SL	07/19/24 14:39
Total Recoverable	Analysis	SM 2340B		1	8100	JF	EET ALB	07/09/24 15:25
Total/NA	Analysis	1664B		1	7985	CO	EET ALB	07/08/24 09:19
Total/NA	Analysis	2540C		1	7815	KB	EET ALB	07/02/24 14:21
Total/NA	Prep	351.2			8010	DL	EET ALB	07/08/24 11:40
Total/NA	Analysis	351.2		1	8585	DL	EET ALB	07/09/24 13:01
Dissolved	Prep	365.2/365.3/365			8218	ES	EET ALB	07/11/24 08:30
Dissolved	Analysis	365.1		1	8500	ES	EET ALB	07/16/24 09:32
Total/NA	Prep	365.2/365.3/365			8218	ES	EET ALB	07/11/24 08:30
Total/NA	Analysis	365.1		1	8500	ES	EET ALB	07/16/24 09:30
Total/NA	Analysis	5220D		1	8084	KH	EET ALB	07/09/24 14:14
Total/NA	Analysis	SM 2540D		1	7827	KS	EET ALB	07/02/24 16:35
Total/NA	Analysis	SM 4500 H+ B		1	8154	DL	EET ALB	07/09/24 22:21
Total/NA	Analysis	SM5210B		1	7579	CO	EET ALB	06/28/24 11:05
Total/NA	Prep	Evaporation			669229	KAC	EET SL	07/03/24 08:58
Total/NA	Analysis	900.0		1	671146	CMM	EET SL	07/18/24 17:21
Total/NA	Analysis	Gross Alpha Adj		1	671821	FLC	EET SL	07/19/24 14:39

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: RG-South20240627
Lab Sample ID: 885-7077-2
Date Collected: 06/27/24 13:10
Matrix: Water
Date Received: 06/27/24 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	624.1		1	169234	NA	EET HOU	07/03/24 03:08
Total/NA	Prep	3511			169191	DR	EET HOU	07/02/24 12:40
Total/NA	Analysis	625.1		1	169694	EM	EET HOU	07/05/24 15:46
Total/NA	Prep	3511			169312	DS	EET HOU	07/02/24 22:42
Total/NA	Analysis	608.3		1	169369	WP	EET HOU	07/03/24 14:58
Total/NA	Prep	3511			169818	DS	EET HOU	07/05/24 21:47
Total/NA	Analysis	608.3		1	170091	WP	EET HOU	07/14/24 13:51
Total/NA	Prep	3510C			169461	BH	EET HOU	07/03/24 13:50
Total/NA	Analysis	8081B_LL		1	169649	WP	EET HOU	07/05/24 12:10
Total/NA	Analysis	300.0		1	7687	JT	EET ALB	06/28/24 12:29
Total/NA	Prep	1633			779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633		1	780306	SS	EET SAC	07/16/24 19:39
Total/NA	Prep	1633	RA		779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633	RA	1	780601	SS	EET SAC	07/17/24 15:21
Total/NA	Prep	HRMS-Sep			777390	BLR	EET SAC	07/08/24 12:40
Total/NA	Analysis	1668A		1	778376	KT	EET SAC	07/12/24 05:52
Total Recoverable	Prep	200.2			7782	TM	EET ALB	07/02/24 13:43
Total Recoverable	Analysis	200.7 Rev 4.4		1	8057	JR	EET ALB	07/08/24 12:11
Total Recoverable	Prep	200.2			7782	TM	EET ALB	07/02/24 13:43
Total Recoverable	Analysis	200.7 Rev 4.4		1	8191	JR	EET ALB	07/10/24 15:03
Dissolved	Analysis	200.8		1	8085	ES	EET ALB	07/09/24 10:34
Total/NA	Prep	200.7/200.8			670850	JSM	EET SL	07/16/24 15:34
Total/NA	Analysis	200.8		2	671639	CGB	EET SL	07/19/24 15:03
Total Recoverable	Analysis	SM 2340B		1	8100	JF	EET ALB	07/09/24 15:25
Total/NA	Analysis	1664B		1	7985	CO	EET ALB	07/08/24 09:19
Total/NA	Analysis	2540C		1	7881	KS	EET ALB	07/03/24 12:52
Total/NA	Prep	351.2			8010	DL	EET ALB	07/08/24 11:40
Total/NA	Analysis	351.2		1	8585	DL	EET ALB	07/09/24 13:02
Dissolved	Prep	365.2/365.3/365			8218	ES	EET ALB	07/11/24 08:30
Dissolved	Analysis	365.1		1	8500	ES	EET ALB	07/16/24 09:36
Total/NA	Prep	365.2/365.3/365			8218	ES	EET ALB	07/11/24 08:30
Total/NA	Analysis	365.1		1	8500	ES	EET ALB	07/16/24 09:34
Total/NA	Analysis	5220D		1	9076	KH	EET ALB	07/23/24 14:19
Total/NA	Analysis	SM 2540D		1	7827	KS	EET ALB	07/02/24 16:35
Total/NA	Analysis	SM 4500 H+ B		1	8154	DL	EET ALB	07/09/24 22:10
Total/NA	Analysis	SM5210B		1	7579	CO	EET ALB	06/28/24 11:05
Total/NA	Prep	Evaporation			669229	KAC	EET SL	07/03/24 08:58
Total/NA	Analysis	900.0		1	671146	CMM	EET SL	07/18/24 17:21
Total/NA	Analysis	Gross Alpha Adj		1	671821	FLC	EET SL	07/19/24 15:03
Total/NA	Analysis	9223B		1	7536	SS	EET ALB	06/27/24 17:12

Lab Chronicle

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Client Sample ID: EB-20240627
Lab Sample ID: 885-7077-3

Date Collected: 06/27/24 11:50
Matrix: Water

Date Received: 06/27/24 14:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633		1	780306	SS	EET SAC	07/16/24 19:57
Total/NA	Prep	1633	RA		779486	ATB	EET SAC	07/15/24 11:26
Total/NA	Analysis	Draft-4 1633	RA	1	780601	SS	EET SAC	07/17/24 15:38

Laboratory References:

= Mount Juliet, 12065 Lebanon Road, Mount Juliet, TN 37122

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25

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
351.2	351.2	Water	Nitrogen, Total Kjeldahl
5220D		Water	Chemical Oxygen Demand
9223B		Water	Escherichia coli
SM5210B		Water	Biochemical Oxygen Demand

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-03-24
Florida	NELAP	E871002	06-30-25
Louisiana (All)	NELAP	03054	06-30-25
Oklahoma	NELAP	1306	08-31-24
Oklahoma	State	2023-139	08-31-24
Texas	NELAP	T104704215	06-30-25
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-27
ANAB	Dept. of Defense ELAP	L2468	01-20-27
ANAB	Dept. of Energy	L2468.01	01-20-27
ANAB	ISO/IEC 17025	L2468	01-20-27
Arizona	State	AZ0708	08-11-24
Arkansas DEQ	State	88-0691	05-18-25
California	State	2897	01-31-26
Colorado	State	CA00044	08-31-24
Florida	NELAP	E87570	06-30-25
Georgia	State	4040	01-29-25
Hawaii	State	Eurofins Sacramento	01-29-25
Illinois	NELAP	200060	03-31-25
Kansas	NELAP	E-10375	10-31-25
Louisiana	NELAP	01944	06-30-25
Louisiana (All)	NELAP	01944	06-30-25
Maine	State	CA00004	04-14-26
Michigan	State	9947	01-29-25
Nevada	State	CA00044	07-31-25
New Hampshire	NELAP	2997	04-19-25
New Jersey	NELAP	CA005	06-30-25
New York	NELAP	11666	04-01-25
Ohio	State	41252	01-29-25
Oregon	NELAP	4040	01-29-25
Texas	NELAP	T104704399-23-17	05-31-25

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Laboratory: Eurofins Sacramento (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
US Fish & Wildlife	US Federal Programs	A22139	04-30-25
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442023-16	02-28-25
Virginia	NELAP	460278	03-14-25
Washington	State	C581	05-05-25
West Virginia (DW)	State	9930C	01-31-25
Wisconsin	State	998204680	08-31-25
Wyoming	State Program	8TMS-L	01-28-19 *

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-08-25
ANAB	ISO/IEC 17025	L2305	04-06-25
Arizona	State	AZ0813	07-28-24
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-24 *
Connecticut	State	PH-0241	03-31-25
Florida	NELAP	E87689	06-30-25
Illinois	NELAP	200023	11-30-24
Iowa	State	373	12-01-24
Kansas	NELAP	E-10236	10-31-24
Kentucky (DW)	State	KY90125	12-31-24
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-24
Louisiana	NELAP	04080	06-30-22 *
Louisiana (All)	NELAP	04080	06-30-25
Louisiana (DW)	State	LA011	12-31-24
Maryland	State	310	09-30-24
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-24 *
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-24
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	10-01-24
New York	NELAP	11616	03-31-25
North Carolina (DW)	State	29700	07-31-24
Oklahoma	NELAP	9997	08-31-24
Oregon	NELAP	4157	09-01-24
Pennsylvania	NELAP	68-00540	02-28-25
South Carolina	State	85002001	06-30-24 *
Texas	NELAP	T104704193	07-31-24
US Fish & Wildlife	US Federal Programs	058448	07-31-24
USDA	US Federal Programs	P330-17-00028	05-18-26
Utah	NELAP	MO00054	07-31-24
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-24

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Albuquerque Metropolitan Arroyo Flood Control Authority
Job ID: 885-7077-1
Project/Site: CMC

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	381	10-31-24

ANALYTICAL REPORT

July 09, 2024

Eurofins - Albuquerque, NM

Sample Delivery Group:	L1752635
Samples Received:	07/02/2024
Project Number:	
Description:	

Report To: Erin Munoz
4901 Hawkins NE
Albuquerque, NM 87109

Entire Report Reviewed By:

Jordan N Zito
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

RG-NORTH20240626 (885-7077-1) L1752635-01 GW

Collected by	Collected date/time	Received date/time
	06/26/24 15:05	07/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2315989	1	07/09/24 03:03	07/09/24 03:03	SET	Mt. Juliet, TN

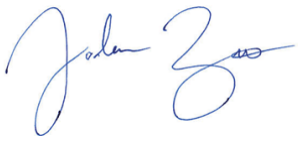
RG-SOUTH20240627 (885-7077-2) L1752635-02 GW

Collected by	Collected date/time	Received date/time
	06/27/24 13:10	07/02/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 7199	WG2315989	1	07/09/24 03:14	07/09/24 03:14	SET	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jordan N Zito
Project Manager

Sample Delivery Group (SDG) Narrative

The following analysis were performed from an unpreserved, insufficiently or inadequately preserved sample.

Lab Sample ID	Project Sample ID	Method
L1752635-01	RG-NORTH20240626 (885-7077-1)	7199
L1752635-02	RG-SOUTH20240627 (885-7077-2)	7199

Wet Chemistry by Method 7199

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hexavalent Chromium-Low Level	ND		0.000100	1	07/09/2024 03:03	WG2315989

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Hexavalent Chromium-Low Level	ND		0.000100	1	07/09/2024 03:14	WG2315989

Method Blank (MB)

(MB) R4091510-1 07/09/24 02:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hexavalent Chromium-Low Level	U		0.0000400	0.000100

L1753184-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1753184-04 07/09/24 04:19 • (DUP) R4091510-5 07/09/24 04:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium-Low Level	0.000379	0.000392	1	3.48		20

L1753184-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1753184-16 07/09/24 07:35 • (DUP) R4091510-8 07/09/24 07:46

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium-Low Level	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4091510-2 07/09/24 02:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium-Low Level	0.00200	0.00206	103	90.0-110	

L1753184-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1753184-01 07/09/24 03:25 • (MS) R4091510-3 07/09/24 03:36 • (MSD) R4091510-4 07/09/24 03:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium-Low Level	0.00100	0.000107	0.00108	0.00107	96.9	95.9	1	90.0-110			0.868	20

L1753184-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1753184-14 07/09/24 06:30 • (MS) R4091510-6 07/09/24 07:03 • (MSD) R4091510-7 07/09/24 07:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Hexavalent Chromium-Low Level	0.00100	ND	0.000978	0.000944	97.8	94.4	1	90.0-110			3.47	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Chain of Custody Record

G233

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Munoz, Erin	Carrier Tracking No(s):	COC No: 885-1125.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Erin.Munoz@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Pace Analytical Services LLC		Accreditations Required (See note): NELAP - Oregon		Job #: 885-7077-1
Address: 12065 Lebanon Road, ,	Due Date Requested: 7/22/2024	**Analysis Requested**		Preservation Codes: -
City: Mount Juliet	TAT Requested (days):			
State, Zip: TN, 37122				
Phone:	PO #:			
Email:	WO #:			
Project Name: CMC	Project #: 88500567			Other: L1752635
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Hexavalent Chromium)/ Hexavalent Chromium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
RG-North20240626 (885-7077-1)	6/26/24	15:05 Mountain		Water			X	1	See Attached Instructions -01
RG-South20240627 (885-7077-2)	6/27/24	13:10 Mountain		Water			X	1	See Attached Instructions -02

AB 07/02/2024
DPA 7 ~~2.7~~ 2.3=2.6 7771 6011 6559

Sample Receipt Checklist
COC Seal Present/Intact: X Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
RA Screen <0.5 mR/hr: X Y N
If Applicable
VOA Zero Headspace: Y N
Pres. Correct/Check: Y N
Containers: 2

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

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

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:
Relinquished by: [signature]	Date/Time: 7/1/24 1350	Company	Received by: [signature]	Date/Time: 07/02/2024 0900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 04/02/2024 7/31/2024

ICOC No:
885-1125

Containers

Count	Container Type	Preservative
2	Other Client Container - preserved	None

L1752635

Subcontract Method Instructions

Sample IDs	Method	Method Description	Method Comments
1, 2	SUBCONTRACT	SUB (Hexavalent Chromium)/ Hexavalent Chromium	CR6

1. Select the 'Print' button to print 1 copy of each label.
2. The Return Shipment instructions, which provide your recipient with information on the returns process, will be printed with the label(s).
3. After printing, select your next step by clicking one of the displayed buttons.

Note: To review or print individual labels, select the Label button under each label image above.

U175263S

Return Shipment Instructions

L1752635

FedEx.

Return Shipment Instructions

1. Place the shipping label on the container's most visible side away from seams.

2. Ship your package one of three ways:

- **Use your regular scheduled pickup.**
- **Drop off at FedEx.** Find your closest location at **fedex.com/locate** or by calling 1.800.GoFedEx 1.800.463.3339
- **Schedule a pickup.** No account number required but label information may be needed. Go to **fedex.com/returnpickup** for FedEx Ground labels with "G" or "PRP" or call 1.800.GoFedEx 1.800.463.3339 and say:
  - "Return Manager" or "PRP" for FedEx Ground labels with "G" or "PRP"
  - "Express Return" for FedEx Express labels with "E" or "Billable Stamp"

Prepare Your Package With Care.

- Use an appropriate container, cushioning materials and at least three strips of packing tape.
- If reusing packaging, remove or black out old shipping labels including their barcode(s).

Special Instructions from the merchant:

Chain-of-Custody Record

Client: AMAFCA

Mailing Address:

Phone #:

email or Fax#: pchaver@amafca.org

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: CMC

Project #:

Project Manager: Patrick Chaver

Sampler: I Torres

On Ice: ☑ Yes ☐ No

# of Coolers: 2 (09)

Cooler Temp (including CF): 10.3+0.1=10.4 (°C)

1.8+0.1=1.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

885-7077 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	See attached list					
6/26/24	1505	AQ	RG-North 20240626	2U	VARIOUS	1											X					
6/27/24	1310	|	RG-South 20240627	2U	Various	2											|					
6/27/24	1150	|	EB-20240627	2 Bottles	Various	3											|					

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
6/27/24	1437			DOO	6/27/24	14:37
Date	Time	Relinquished by:	Received by:	Via:	Date	Time

Remarks: SEE attached list.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories This serves as notice of this possibility Any sub-contracted data will be clearly notated on the analytical report

Collaborative Monitoring Cooperative - Analyses List
Attach to Chain of Custody

Please refer to attached NPDES Permit No. NMR04A00 Appendix F. Methods and minimum quantification levels (MQL's) will be those approved under 40 CFR 136 and specified in the attached permit

Hardness (Ca + Mg)	NA	Total	200.7	2.4
Lead	7439-92-1	Dissolved	200.8	0.09
Copper	7440-50-8	Dissolved	200.8	1.06
Ammonia + organic nitrogen	7664-41-7	Total	350.1	31.32
Total Kjehldal Nitrogen	17778-88-0	Total	351.2	58.78
Nitrate + Nitrite	14797-55-8	Total	353.2	10.17
Polychlorinated biphenyls (PCBs)	1336-36-3	Total	1668	0.014
Tetrahydrofuran (THF)	109-99-9	Total	624.1	7.9
bis(2-Ethylhexyl)phthalate	117-81-7	Total	625.1	0.2
Dibenzofuran	132-64-9	Total	625.1	0.2
Indeno(1,2,3-cd)pyrene	193-39-5	Total	610	0.2
Benzo(b)fluoranthene	205-99-2	Total	610	0.1
Benzo(k)fluoranthene	207-08-9	Total	610	0.1
Chrysene	218-01-9	Total	610	0.2
Benzo(a)pyrene	50-32-8	Total	610	0.3
Dibenzo(a,h)anthracene	**53-70-3**	**Total**	**610**	**0.3**
Benzo(a)anthracene	56-55-3	Total	610	0.2
Dieldrin	60-57-1	Total	625.1	0.1
Pentachlorophenol	87-86-5	Total	604	0.2
Benzidine	92-87-5	Total	604	0.1
Chemical Oxygen Demand	E1641638[2]	Total	HACH	5100
Gross alpha (adjusted)	NA	Total	Method 900	0.1 pCi/L
Total Dissolved Solids	E1642222[2]	Total	SM 2540C	60.4
Total Suspended Solids	NA	Total	SM 2540D	3450
Biological Oxygen Demand	N/A	Total	Standard Methods	930
~~Oil and Grease~~		Total	1664A	5000
Ecoli Enumeration			SM 9223B	
~~pH~~			SM 4500	
Phosphorus		Dissolved	365.1	100
Phosphorus		Total	365.1	100
Chromium IV		Total	3500Cr C-2011	100
~~Per- and polyfluorinated~~ alkyl substances (PFAS)			537.1	

PFAS

Appendix F - Minimum Quantification Levels (MQL's)

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE and CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thalllium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury (*)	0.0005 0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Clorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		
ACID COMPOUNDS			
2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
		BASE/NEUTRAL	
Acenaphthene	10	Dimethyl Phthalate	10
Anthracene	10	Di-n-Butyl Phthalate	10
Benzidine	50	2,4-Dinitrotoluene	10
Benzo(a)anthracene	5	1,2-Diphenylhydrazine	20
Benzo(a)pyrene	5	Fluoranthene	10
3,4-Benzofluoranthene	10	Fluorene	10
Benzo(k)fluoranthene	5	Hexachlorobenzene	5
Bis(2-chloroethyl)Ether	10	Hexachlorobutadiene	10
Bis(2-chloroisopropyl)Ether	10	Hexachlorocyclopentadiene	10
Bis(2-ethylhexyl)Phthalate	10	Hexachloroethane	20
Butyl Benzyl Phthalate	10	Indeno(1,2,3-cd)Pyrene	5
2-Chloronapthalene	10	Isophorone	10
Chrysene	5	Nitrobenzene	10
Dibenzo(a,h)anthracene	5	n-Nitrosodimethylamine	50
1,2-Dichlorobenzene	10	n-Nitrosodi-n-Propylamine	20
1,3-Dichlorobenzene	10	n-Nitrosodiphenylamine	20
1,4-Dichlorobenzene	10	Pyrene	10
3,3'-Dichlorobenzidine	5	1,2,4-Trichlorobenzene	10
Diethyl Phthalate	10		
		PESTICIDES AND PCBS	
Aldrin	0.01	Beta-Endosulfan	0.02
Alpha-BHC	0.05	Endosulfan sulfate	0.02
Beta-BHC	0.05	Endrin	0.02
Gamma-BHC	0.05	Endrin Aldehyde	0.1
Chlordane	0.2	Heptachlor	0.01
4,4'-DDT and derivatives	0.02	Heptachlor Epoxide	0.01
Dieldrin	0.02	PCBs **	0.2
Alpha-Endosulfan	0.01	Toxaphene	0.3

(MQL's Revised November 1, 2007)

(*) Default MQL for Mercury is 0.005 unless Part I of your permit requires the more sensitive Method 1631 (Oxidation / Purge and Trap / Cold vapor Atomic Fluorescence Spectrometry), then the MQL shall be 0.0005.

(**) EPA Method 1668 should be utilized when PCB water column monitoring is conducted to determine compliance with permit requirements. Either the Arochlor test (EPA Method 8082) or USGS test method (8093) may be utilized for purposes of sediment sampling as part of a screening program, but must use EPA Method 1668 (latest revision) for confirmation and determination of specific PCB levels at that location.

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque, NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Munoz, Erin	Carrier Tracking No(s):	COC No: 885-1129.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Erin.Munoz@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - Oregon		Job #: 885-7077-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 7/24/2024			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CMC	Project #: 88500567			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
-

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	900.0/Evaporation Standard Target List	GrAlAdjUnc_Calc	200.8/200_2%P Uranium	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
RG-North20240626 (885-7077-1)	6/26/24	15:05 Mountain		Water			X	X	X	1	
RG-South20240627 (885-7077-2)	6/27/24	13:10 Mountain		Water			X	X	X	1	

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 7/1/24 1425	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: M. Pinette	Date/Time: JUL 02 2024 0900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 04/02/2024

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109
Phone: 505-345-3975 Fax: 505-345-4107

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Munoz, Erin	Carrier Tracking No(s):	COC No: 885-1126.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Erin.Munoz@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing Northern Ca		Accreditations Required (See note): NELAP Oregon		Job #: 885-7077 1
Address: 880 Riverside Parkway	Due Date Requested: 7/25/2024			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: CMC	Project #: 88500567			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633/1633_SPE EPA 1633 Method List	1668A/HRMS_Sep_P Full List (209)	Total Number of containers	Special Instructions/Note
			Preservation Code:							
RG-North20240626 (885-7077 1)	6/26/24	15:05 Mountain		Water			X	X	4	J and MDL
RG-South20240627 (885-7077-2)	6/27/24	13.10 Mountain		Water			X	X	4	J and MDL
EB-20240627 (885-7077-3)	6/27/24	11 50 Mountain		Water			X		2	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/1/24 1405			7.1.24 1330	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:
	Seal	3.4w

Ver: 04/02/2024

eurofins | Environment Testing

Sacramento Sample Receiving Notes (SSRN)

Tracking # 777600373090

Job ____ 885-7077 Field Sheet

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSL / OnTrac / Goldstreak / USPS / Other____

Use this form to record Sample Custody Seal Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Therm ID 111 Corr Factor (+ / -) ____ °C

Ice____ Wet____ Gel 1 Other ____

Cooler Custody Seal: Seal

Cooler ID: ____

Temp Observed 3.4 °C Corrected 3.4 °C

From Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: ____ Date: 7.2.24

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
COC is complete w/o discrepancies	☑	☐	☐
Sample custody seal?	☐	☐	☑
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Is the Field Sampler's name on COC?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: ____ Date: 7.2.24

Notes ____

Trizma Lot #(s) 0000279288

Ammonium Acetate Lot #(s) ____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
NCM Filed?	☐	☐	☑
Samples received within hold time?	☐	☐	☑
Log Release checked in TALS?	☐	☐	☑

Initials: ____ Date: 7.2.24

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-7077-1

Login Number: 7077

List Number: 1

Creator: Cason, Cheyenne

List Source: Eurofins Albuquerque

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-7077-1

Login Number: 7077
List Number: 2
Creator: Torrez, Lisandra

List Source: Eurofins Houston
List Creation: 07/02/24 10:56 AM

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

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-7077-1

Login Number: 7077
List Number: 4
Creator: Simmons, Jason C

List Source: Eurofins Sacramento
List Creation: 07/02/24 12:15 PM

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	Seal
Sample custody seals, if present, are intact.	N/A	
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	3.4c
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?	N/A	Received project as a subcontract.
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	

Login Sample Receipt Checklist

Client: Albuquerque Metropolitan Arroyo Flood Control Authority

Job Number: 885-7077-1

Login Number: 7077
List Number: 3
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 07/02/24 01:31 PM

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.	N/A	
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT 2

FY 2024 DRY SEASON COMPLETED DATA VERIFICATION AND VALIDATION (V&V) FORMS

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (December 2023 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Alameda – 12/13/2023– E. coli Only Sample
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: 0

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: 0

B. Do all of the analytical suites have the correct number and type of analytes. ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
______	______	______	______	______

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 3: Verify Flow Data

*Note – Not Applicable – no flow data provided with CMC sample collection
A._Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
______	______	__________
______	______	__________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
______	______	__________	_________
______	______	__________	_________

Total number of occurrences: 0

_Not Applicable
☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☐ Yes ☒No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken

Total number of occurrences: 0

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 5: Validate Blanks Results
Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database? *
_____	______	______	______	______		_________
______	______	______	______	______		_________

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 6: Validate Holding Times Violations
Were any samples submitted that did not meet specified holding times? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*
______	______	______	______	______		_________

*See validation procedures to determine which associated data need to be flagged.
Total number of occurrences: 0

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
_____	_____	_____	_____	_____	_____		_____
_____	_____	_____	_____	_____	_____		_____

N/A – no duplicate/replicate results

Total number of occurrences: 0

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 2/6/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

2/6/24

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (December 2023 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Rio Grande North – 12/13/2023
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: 0

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 12/12/2024

- -

Step 2: Verify Data Deliverables
A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: 0

B. Do all of the analytical suites have the correct number and type of analytes. ☐ Yes ☒ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
	.			
______	______	______	______	______

Total number of occurrences: 0

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 3: Verify Flow Data
*Note – Not Applicable – no flow data provided with CMC sample collection
A. Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
______	______	__________
______	______	__________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
______	______	__________	_________
______	______	__________	_________

Total number of occurrences: 0

Not Applicable
☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☒ Yes ☐ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
Rio Grande North	12/13/2023	Lab report lists two Total Phosphorous results and the dissolved	BHI emailed AMAFCA on 2/7/24 and added note to the lab report.

		and total are not clear in the reporting.	

Eurofins lab report number 2312898.

Total number of occurrences: 1

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 5: Validate Blanks Results

Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database?*
_____	______	______	______	______		_________
______	______	______	______	______		_________

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 6: Validate Holding Times Violations

Were any samples submitted that did not meet specified holding times? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*
______	______	______	______	______		_________

*See validation procedures to determine which associated data need to be flagged.
*Note – Lab reports lists pH with hold time flag. Database uses field data reported pH, so this is hold time is not applicable.

The BOD has a hold time flag. The Rio Grande North sample was held until the CMC was sure the monitoring event was a qualifying storm event. This led to the hold time flag for BOD.

Total number of occurrences: 0

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☐ Yes ☒ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
______	______	______	______	______	______		_________
______	______	______	______	______	______		_________

Total number of occurrences: 0

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

Sarah Graney [signature] 2/12/24

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (December 2023 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Rio Grande South – 12/14/2023
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?

☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: **0**

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: **0**

B. Do all of the analytical suites have the correct number and type of analytes. ☐ Yes ☒ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 3: Verify Flow Data
*Note – Not Applicable – no flow data provided with CMC sample collection
A. Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
______	______	__________
______	______	__________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
______	______	__________	_________
______	______	__________	_________

Total number of occurrences: 0

Not Applicable
☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☒ Yes ☐ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
Rio Grande South	12/14/2023	Lab report lists two Total Phosphorous results and the dissolved	BHI emailed AMAFCA on 2/7/24 and BHI added note to the lab report.

		and total are not clear in the reporting.	
Rio Grande South	12/14/2023	Lab report has mis-labeled the Rio Grande South Semivolatile data as Rio Grande North.	BHI emailed AMAFCA on 2/7/24 to ask that they clarify this with the lab and BHI added note to the lab report.

*Note – Eurofins lab report number 2312898.

Total number of occurrences: 2

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 5: Validate Blanks Results
Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database? *

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 6: Validate Holding Times Violations
Were any samples submitted that did not meet specified holding times? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*
______	______	______	______	______		_________

*See validation procedures to determine which associated data need to be flagged.
*Note – Lab reports lists pH with hold time flag. Database uses field data reported pH, so this is hold time is not applicable.
Total number of occurrences: 0

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☐ Yes ☒ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
______	______	______	______	______	______		_________
______	______	______	______	______	______		_________

Total number of occurrences: 0

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 2/12/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

2/12/24

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (June 2024 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Rio Grande South – 6/27/2024
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: **0**

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received

Total number of occurrences: **0**

B. Do all of the analytical suites have the correct number and type of analytes. ☐ Yes ☒ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
		Refer to Step 4 for list and missing analytes.		

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 3: Verify Flow Data

*Note – Not Applicable – no flow data provided with CMC sample collection

A. Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
______	______	__________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
______	______	__________	__________

Total number of occurrences: 0

Not Applicable

☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☒ Yes ☐ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
Rio Grande South	6/27/2024	DO field data, collection protocol may have resulted in low DO reading.	Have reached out to the sampler there was a delay during sampling that could account for the low DO reading.
Rio Grande South	6/27/2024	Lab report did not include results for Ammonia (mg/L as N)	Notified AMAFCA (CMC member) of the missing parameter.

Rio Grande South	6/27/2024	Lab report did not include results for Benzo[a]pyrene	Notified AMAFCA (CMC member) of the missing parameter.

*Note – Eurofins Job ID: 885-7077-1.

Total number of occurrences: 3

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 5: Validate Blanks Results

Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database?*

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 6: Validate Holding Times Violations

Were any samples submitted that did not meet specified holding times? ☒ Yes ☐ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*

Rio Grande South	6/272024	Tetrahydro-furan		yes	H	Yes
Rio Grande South	6/272024	Dieldrin		yes	H	Yes

*See validation procedures to determine which associated data need to be flagged.
*Note – Lab reports lists pH with hold time flag. Database uses field data reported pH, so this is hold time is not applicable.
Total number of occurrences: 2

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☒ Yes ☐ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
Rio Grande South	Lab Duplicate	Lab Duplicate	6/27/2024	Dieldrin		yes	*+
Rio Grande South	Lab Duplicate	Lab Duplicate	6/27/2024	5 Semivolatile Organic Compounds		yes	*+

Total number of occurrences: 6

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 8/23/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

8/23/2024

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (June 2024 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Rio Grande (RG) North – 6/26/2024
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?
☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________

Total number of occurrences: **0**

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 2: Verify Data Deliverables
A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: **0**

B. Do all of the analytical suites have the correct number and type of analytes. ☐ Yes ☒ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
	.	Refer to Step 4 for list and missing analytes.		

Total number of occurrences: **0**

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 3: Verify Flow Data

*Note – Not Applicable – no flow data provided with CMC sample collection

A. Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?

Total number of occurrences: 0

Not Applicable

☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☒ Yes ☐ No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
Rio Grande North	6/26/2024	DO field data, collection protocol may have resulted in low DO reading.	Have reached out to the sampler there was a delay during sampling that could account for the low DO reading.
Rio Grande North	6/26/2024	Lab report did not include results for Ammonia (mg/L as N)	Notified AMAFCA (CMC member) of the missing parameter.
Rio Grande North	6/26/2024	Lab report did not include results for Benzo[a]pyrene	Notified AMAFCA (CMC member) of the missing parameter.

Eurofins Job ID: 885-7077-1.

Total number of occurrences: 3

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 5: Validate Blanks Results

Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database? *

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 6: Validate Holding Times Violations

Were any samples submitted that did not meet specified holding times? ☒ Yes ☐ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*
Rio Grande North	6/26/2024	Tetrahydro-furan		yes	H	Yes
Rio Grande North	6/26/2024	Dieldrin		yes	H	Yes

*See validation procedures to determine which associated data need to be flagged.

*Note – Lab reports lists pH with hold time flag. Database uses field data reported pH, so this is hold time is not applicable.
The BOD has a hold time flag. The Rio Grande North sample was held until the CMC was sure the monitoring event was a qualifying storm event. This led to the hold time flag for BOD.

Total number of occurrences: 2

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☒ Yes ☐ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
Rio Grande North	Lab Duplicate	Lab Duplicate	6/26/2024	Dieldrin		yes	*+
Rio Grande North	Lab Duplicate	Lab Duplicate	6/26/2024	5 Semivolatile Organic Compounds		yes	*+

Total number of occurrences: 6

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 8/21/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

8/21/2024

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	

Attachment 1.1 Water Quality Sample Data Verification and Validation Worksheet

Study Name: Compliance Monitoring Cooperative (CMC)
Year: FY 2024 (June 2024 – Dry Season Sample)
Project Coordinator: For Data Review and Reporting – SJG, BHI
V&V Reviewer: SJG
Data covered by this worksheet: Alameda – 6/26/2024– E. coli Only Sample
Version of Verification/Validation Procedures: QAPP –AMAFCA SOP #5 (7/2022)

Step 1: Verify Field Data

A. Are all Field Data forms present and complete? ☒ Yes ☐ No

If yes, proceed; if no, attempt to locate missing forms, then indicate any remaining missing forms and action taken.

Missing Field Data Forms	Action Taken

Total number of occurrences: 0

B. Are station name and ID, and sampling date and time on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station and Parameter	Action Taken	Re-verified?

Total number of occurrences: 0

C. Are field data on forms consistent with database? ☒ Yes ☐ No
If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify.

Station	Sampling Date	Parameter(s) Corrected	Re-verified?

Total number of occurrences: 0

D. Are RIDs correct and associated with the correct analytical suite, media subdivision (e.g. surface water, municipal waste, etc.) and activity type (e.g. Field observation, Routine sample, QA sample etc.)?

☒ Yes ☐ No

If yes, proceed; if no, indicate errors identified, correct errors in database and re-verify

Station/RID	Sampling Date	RID Corrected	Re-verified?
______	______	______	_________
______	______	______	_________

Total number of occurrences: 0

☒ **Step 1 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 2: Verify Data Deliverables

A. Have all data in question been delivered? ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing data (samples or blanks) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken. Complete this step upon receipt of all missing data.

RID	Submittal Date	Missing Data/Parameters	Date of Initial Verification	Date Missing Data Were Received
______	______	______	______	______

Total number of occurrences: 0

B. Do all of the analytical suites have the correct number and type of analytes. ☒ Yes ☐ No

If yes, proceed; if no, indicate RIDs with missing or incorrect analyte(s) or attach report with applicable RIDs highlighted. Contact data source and indicate action taken.

RID	Submittal Date	Missing or Incorrect Parameters	Action Taken	Re-verified?
______	______	______	______	______

☒ **Step 2 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 3: Verify Flow Data
*Note – Not Applicable – no flow data provided with CMC sample collection
A._Identify incorrect or missing data on the flow calculation spreadsheet and correct errors.

Station	Sampling Date	Flow data missing or incorrect?
______	______	__________
______	______	__________

Total number of occurrences: 0

B. Identify incorrect or missing discharge measurements, correct errors in database and re-verify.

Station	Sampling Date	Flow data missing or incorrect?	Re-verified?
______	______	__________	_________
______	______	__________	_________

Total number of occurrences: 0

Not Applicable
☐ **Step 3 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 4: Verify Analytical Results for Missing Information or Questionable Results

Were any results with missing/questionable information identified? ☐ Yes ☒No

If no, proceed; if yes, indicate results with missing information or questionable results or attach report. Contact data source and indicate action taken. Complete this step upon receipt of missing information or clarification of questionable results (clarify questionable results only, DO NOT change results without written approval (from lab or QA officer) and associated documentation).

RID	Sample Date	Missing or Questionable Information/Results	Action Taken
	6/26/2024	DO field data, collection protocol may have resulted in low DO reading.	Have reached out to the sampler to determine if there were any issues during sampling that could account for the low DO reading.

Total number of occurrences: 1

☒ **Step 4 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 5: Validate Blanks Results

Were any analytes of concern detected in blank samples? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager, with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes have been added to database correctly.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database?*
_____	______	______	______	______		_________
______	______	______	______	______		_________

*See validation procedures to determine which associated data need to be flagged and include on *Validation Codes Form*.

Total number of occurrences: 0

☒ **Step 5 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 6: Validate Holding Times Violations

Were any samples submitted that did not meet specified holding times? ☐ Yes ☒ No

If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID	Sample Date	Parameter	[Blank]	[Sample]	Validation Code/Flag Applied	Code/Flag verified in database to ALL associated data?*
______	______	______	______	______		_________

*See validation procedures to determine which associated data need to be flagged.

Total number of occurrences: 0

☒ **Step 6 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

- -

Step 7: Validate Replicate/Duplicate Results (if applicable)
Were any replicate/duplicate pairs submitted outside of the established control limit of 20%?
☐ Yes ☒ No
If no, proceed; if yes, list results that need to have validation codes applied in the database save these results as an excel file and forward to QA officer or Program Manager with a request to add appropriate validation codes to database. Complete this step after verifying that validation codes/flags have been added to database.

RID Pairs		Replicate or Duplicate?	Sample Date	Parameter	RPD	Validation Code/Flag Applied	Code/Flag verified in database applied?*
_____	_____	_____	_____	_____	_____		_____
_____	_____	_____	_____	_____	_____		_____

N/A – no duplicate/replicate results

Total number of occurrences: 0

☒ **Step 7 Completed** ***Initials:*** SJG ***Date:*** 8/13/2024

****

After all of the above steps have been completed, save and print the worksheet, attach all applicable supplemental information and sign below.

I acknowledge that the data verification and validation process has been completed for the data identified above in accordance with the procedures described in the CMC QAPP, SOP #2

Sarah Cannon 8/13/24

Data Verifier/Validator Signature Date

COMPLETION OF DATA VERIFICATION AND VALIDATION PROCESS

Once the data verification and validation process has been completed for the entire study (note: if the worksheet is for a subset of the data from a study, be sure ALL the data for the entire study is included before final completion of the data verification and validation process), notify the NMSQUID administrator that the process is complete and request that “V V in STORET” be added to the project title.

Once all data have been verified and validated for a study provide copies of ALL *Data Verification and Validation Worksheets* and attachments associated with the study to the Quality Assurance Officer and retain originals in the project binder.

Attachment 1.2 SWQB Validation Codes

When deficiencies are identified through the data verification and validation process, AMAFCA documents or "flags" the deficiencies by assigning validation codes. All data collected from the last compliant QC sample and up to the next compliant QC sample are assigned validation codes. The validation code alerts the data user that the results are outside QA control limits and may require re-sampling or a separate, qualitative analysis based on professional judgment.

Validation Code	Definition	WQX Equivalent
A1	Sample not collected according to SOP	
B1	Chemical was detected in the field blank at a concentration less than 5% of the sample concentration.	
BN	Blanks NOT collected during sampling run	
BU	Detection in blank. Analyte was not detected in this sample above the method's sample detection limit.	BU
RB1	Chemical was detected in the field blank at a concentration greater than or equal to 5% of the sample concentration. Results for this sample are rejected because they may be the result of contamination; the results may not be reported or used for regulatory compliance purposes.	B
R1	Rejected due to incorrect sample preservation	R
R2	Rejected due to equipment failure in the field	R
R3	Rejected based on best professional judgment	R
D1	Spike recovery not within method acceptance limits	
F1	Sample filter time exceeded	
J1	Estimated: the analyte was positively identified and the associated value is an approximate concentration of the analyte in the sample	J
K1	Holding time violation	H
Ea	Estimated-Incubation temperature between 35.5 and 38.0° Celsius	
Er	Rejected-Incubation temperature < 34.5 or >38.0° Celsius	
PD1	Percent difference between duplicate samples excessive	
S1	Per SLD, uncertainties (sigmas) are expressed as one standard deviation, i.e. one standard error. Small negative or positive values that are less than two standard deviations should be interpreted as "less than the detection limit."	
S2	Data are suspect but deemed usable based on best professional judgment; documentation of justification is required and should be included in the Data Verification and Validation Packet and reported with results	
Z1	Macroinvertebrate data did not meet QC criteria specified in Section 2.5 of QAPP	
H1	Habitat data did not meet QC criteria specified in Section 2.5 of QAPP	