Environmental Advisory Committee
4:00 p.m., Thursday, December 12, 2024
Council Chambers
1207 Palm Boulevard, Isle of Palms, SC 29451

Agenda

1. **Call to order** and acknowledgment that the press and the public have been duly notified of the meeting in accordance with the Freedom of Information Act

2. **Citizen's Comments**

3. **Approval of previous meeting's minutes –** November 14, 2024

4. **Presentations-** none

5. **Old Business**
   i. Wildlife

   ii. Litter- discussion of lighting ordinance
   update on beach trash program

   iii. Water Quality- update on water quality testing program
   update on City engaging Federal lobbyist

   iv. Climate Action- discussion of Dominion tree trimming

6. **New Business**
   i. Review of EAC accomplishments list for 2024

7. **Miscellaneous Business**
   Next meeting date: 4:00 p.m., Thursday, January 9, 2025

8. **Adjournment**

ENVIRONMENTAL ADVISORY COMMITTEE
4:00pm, Thursday, November 14, 2024
1207 Palm Boulevard, Isle of Palms, SC
and broadcasted live on YouTube: https://www.youtube.com/user/cityofisleofpalms

MINUTES

1. **Call to order**

Present: Sandra Brotherton, Mary Pringle, Laura Lovins, Belvin Olasov, Lucia Spiotta, Doug Hatler

Absent: Dane Buckout, Lucia Spiotta, Todd Murphy

Staff Present: Council Member Miars, Director Kerr, Zoning Administrator Simms, Asst. Director Asero

2. **Citizen's Comments**

Tucker Redford, 511 Carolina Boulevard, said the current City code does not address removal of tree limbs that are dangerous to people as opposed to dangerous to a structure. Mr. Redford said he has a pecan tree that sheds pecans that fall on people coming into his home. He believes he should be able to trim a tree that is hazardous to him and his guests.

James Coates who lives in the "pink house" spoke with concern about Dominion Energy removing palm trees. He said these trees grow very slowly and believes that Dominion Energy is overstating the growth rates and their proximity to the power lines.

3. **Approval of previous meeting's minutes**

MOTION: Ms. Lovins made a motion to approve the minutes of the October 17, 2024 meeting, and Ms. Pringle seconded the motion. The motion passed unanimously.

4. **Presentation**

Susan Hill Smith shared with the Committee a plan for the City to develop a student-driven seasonal litter program. Details of her plan were sent to Committee members prior to the meeting and are attached to these minutes.

Dr. Brotherton said that she was told funding from Palmetto Pride cannot fund salaries. She would like to see a more definitive plan before further discussion. Ms. Smith said she was not told no by Palmetto Pride and will follow up. She suggested other grants could pay for such an initiative and believes the City should be doing more to remove litter from the beach.

Director Kerr shared his concern that the staff is already consumed with the demands of the summer season and does not have anyone who could manage such an effort. If the goal is additional trash removal, then that could be outsourced.

Ms. Smith said having interns would be less costly, would involve students in civic efforts, and allow for data collection. Director Kerr suggested this might be something the parking management company could add to their scope of work.

Mr. Hatler said data already exists and if there is a need for more cleanup efforts, then a service should be hired. Mr. Olasov will ask if AmeriCorps could supervise such an effort.

5. **Old Business**

A. **Wildlife**

Ms. Pringle said that Sharlene Johnson will be at the Native Plant garden tomorrow to winterize the space. They will work on developing other City-owned garden beds in the spring.

She also reported that what was reported as a dead sea turtle to her by USACE was a marsh terrapin. She sent a genetic sample as part of a study.

B. **Litter**

Dr. Brotherton, referencing her email regarding possible beach trash receptacles (attached to these minutes), the considerations she and Asst. Director Asero kept in mind as they discussed replacement trash receptacles. She noted that signage on the corrals would be an additional expense.

Conversation ensued as to what part, if any, the City's future beach litter removal vendor could play in cleaning the beach within Wild Dunes.

Director Kerr said now would be the time for the Committee to make a recommendation about this plan so that it could be addressed in the FY26 budget planning, which begins in January.

MOTION: Ms. Lovins made a motion to recommend the proposal as presented to City Council "with different management options for on-beach and off-beach litter corrals and cans." Mr. Olasov seconded the motion. The motion passed unanimously.

C. **Water Quality**

Mr. Hatler said water samples have been collected, and he hopes to share the results at the December meeting.

D. **Climate Action**

Mr. Olasov would like to move the discussion about leaf blowers to the December agenda.

6. **New Business**

A. **Discussion of Dominion Energy Palm Tree Removal**

B. **Discussion of Dominion Energy program to underground power lines**

Committee members discussed their concerns about Dominion Energy's plans to remove palm trees from the island. Ms. Lovins hopes to find an independent arborist who can advise residents about the palm trees on their properties.

Ms. Lovins asked about the City's position on pushing Dominion Energy to increase the pace at which they underground the power lines. Director Kerr explained the Non-Standard Service Fee Fund and the City's intent to ask Dominion Energy if it can be used to develop an undergrounding master plan to prioritize undergrounding projects. He said in the past the City has prioritized aesthetics when selecting such projects, but may need to change that focus to areas where service is lost most frequently after a storm.

Council Member Miars stated that the City has little power with Dominion Energy and staff is working hard to get the projects completed. She noted that all communities are upset about these tree trimming/removal projects and there is no legal recourse.

The Committee discussed the costs and feasibility of potential replanting efforts.

Director Kerr said the trees marked as Category 2 or 3 will be reassessed in five years. The City can disseminate information to residents regarding arborists to help them assess the trees on their private property. Ms. Lovins suggested prioritizing undergrounding projects in relation to the location of trees marked as Category 2 or 3.

6. **Miscellaneous Business**

7. **Adjournment**

The next meeting of the Environmental Advisory Committee is scheduled for Thursday, December 12, 2024 at 4pm.

Mr. Hatler made a motion to adjourn, and Ms. Lovins seconded the motion. The meeting was adjourned at 5:32pm.

Respectfully submitted,

Nicole DeNeane
City Clerk

Hi Sandy,

I would like to speak to the EAC about creating a student-driven, seasonal litter program at the Thursday meeting but would need to do it early in the meeting as I have something to get to by 4:45 pm.

I'm in a conversation with Palmetto Pride about the City applying for one of their grants to help make it happen - Desiree previously asked me to reach out to them last time I talked about this before. It's a longshot that it will fit their requirements and their deadline technically passed on Nov. 1 and, but we might be able to squeak in there before the December awards.

As I've mentioned to Desiree, and probably you and the EAC before, I hope to help set things in motion to create a 10-week City program that provides four paid, part-time student workers, possibly interns, through the busy summer season to collect and document litter daily on Isle of Palms. I envision the students focusing on the beach and commercial areas at Front Beach - providing a daily beach clean before litter gets into the ocean & dunes. But they could help with other stretches of the beach and public parking areas as well as the City Marina.

If Wild Dunes is open to it and can help cover the costs, we could consider adding additional positions for them as well. Or maybe we wait on that until year 2.

Otherwise, this could be a collaboration with the City, Isle of Palms Cleanup Crew, the South Carolina Aquarium conservation team (definitely on board) and possibly a local college professor. The target group would be college students interested in conservation and/or civic careers.

The data could be valuable in several ways. If we start in Summer 2025, we would have a robust data set to compare to the following year after the changes with our beach trash cans - helpful for us & many other beach communities.

If a Palmetto Pride grant doesn't work out, I would try to reach out to LENS to see if they might help. However, the costs would not be prohibitive to the City if we offered a $3,000 stipend for four interns over the summer - a total of $12,000.

Let me know what's possible.

Thanks!

Susan

Beach Litter Management Suggestions

The following suggestions for beach litter management were developed with consideration for improved efficiency, environmental protection, cost, and appearance. For beach access paths and the parking lot, roll cats housed inside a corral are recommended. These corrals would hide the carts with IOP signage and thus serve a dual purpose. In the commerical area on the street, the roll carts would be inside an enclosure with the lid open and trash would be deposited into the can through a flap or other covered opening. Use of the roll carts is efficient with regards to emptying and would thus reduce cost to service them.

Location of Trash Cans

Access Path Number	# of cans at street	# of cans off beach but behind dune	Additional notes
2	1	0	Serves 1A, 1B and 2A access paths
3	1 or 2	0	
3A	0	0	
4	1	0	
4A	0	0	One can there currently; looked as if items dumped there
5	2	1	
6	2	0	
6A	1	0	
7	2	1	
7A	0	0	
8	2	0	
8A	0	0	
9	2	1	ADA access
Front beach; restroom area	3	3 walkway beginning 3 walkway ending 2 restrooms	at restrooms
Commercial area			Recommend cans with an enclosure from 10th to parking lot entrance
Sea Cabins	2	2 midways to beach	
Parking Lot	Multiple corrals (5-6) at 2 entrances, mobile unit, exit, and midway between front and back of lot		
14th	2	0	Will be an emergency, pedestrian access
22	2	2 boardwalk	
23	2	0	
25	3	3	
26	1	0	The “disappearing” access path
26A	1	0	boardwalk
27	2	0	
28	2	0	
29	1	0	
30	1	0	

30A	1	0	
31	2	1	
32A	1	0	
33A	1	0	
34A	2	2	ADA access
35A	1	0	
36A	1	1	
37A	2	0	
38A	1	0	
40	0	0	
41	2	0	
42	2	2	ADA access
43	1	0	
44	0	0	
45	1	0	
46	1	1	ADA access
49	2	0	
50	1	0	
51	1	0	
52	1	1	
53	1	0	Emergency access
57	2	0	

Additional notes and thoughts for consideration:

1. An “A” beside the street number indicates that the beach access does not line up with a corresponding intersecting street.
2. The “disappearing path” appears to have been mostly taken over by a homeowner who paved it and uses it for a driveway.
3. Bigbelly cans may be considered in the future but currently they can have up to a 2-week time for service and are expensive.
4. What should be the role of the city with beach litter management in a private resort?

GEL Laboratories LLC
a member of The GEL Group INC

2040 Savage Road | Charleston, SC 29407
843.556.8171
gel.com

November 29, 2024

Matt Simms
City of Isle of Palms
1207 Palm Blvd
Isle of Palms, South Carolina 29451

Re: IOP Baseline Water QMP
Work Order: 694581

Dear Matt Simms:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on November 07, 2024. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4422.

Sincerely,

Adrian Melendrez for
Jacob Crook
Project Manager

Purchase Order: TBD
Enclosures

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

CIOP001 City of Isle of Palms

Client SDG: 694581 GEL Work Order: 694581

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a Tracer compound

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Jacob Crook.

Reviewed by A. Melendez

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-2	Project:	CIOP00124
Sample ID:	694581001	Client ID:	CIOP001
Matrix:	Storm Water		
Collect Date:	07-NOV-24 08:00		
Receive Date:	07-NOV-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
GEL Field Crew pH (SCID 10585) "As Received"												
Field pH		7.40			SU			AXM8	11/07/24	0800	2702034	1
Nutrient Analysis												
EPA 351.2, Nitrogen, Total Kjeldahl (TKN) "As Received"												
Nitrogen, Total Kjeldahl		0.662	0.0330	0.100	mg/L	1.00	1	AXH3	11/14/24	0554	2703489	2
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.370	0.00700	0.0200	mg/L		1	JLD1	11/08/24	1509	2702136	3
EPA 365.4 Phosphorus, Total "As Received"												
Phosphorus, Total as P		0.136	0.0200	0.0500	mg/L	1.00	1	JLD1	11/13/24	1248	2703491	4
Total Nitrogen Calculation "See Parent Products"												
Total Nitrogen		1.03	0.0330	0.100	mg/L		1	AXH3	11/14/24	0718	2702123	5
Oil & Grease Analysis												
EPA 1664A/B n-Hexane Extractable Material (O&G) "As Received"												
Oil and Grease	U	ND	1.35	4.81	mg/L			CH6	11/27/24	1458	2712787	6
Solids Analysis												
SM 2540D Total Suspended Solids (TSS) "As Received"												
Total Suspended Solids	J	9.60	2.28	10.0	mg/L			KLP1	11/14/24	1128	2705918	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	AXH3	11/13/24	1115	2703484
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXH3	11/13/24	1115	2703490

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 351.2	
3	EPA 353.2 Low Level	
4	EPA 365.4	
5	Calculation	
6	EPA 1664A/1664B	
7	SM 2540D	

Notes:

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-2	Project:	CIOP00124
Sample ID:	694581001	Client ID:	CIOP001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-6	Project:	CIOP00124
Sample ID:	694581002	Client ID:	CIOP001
Matrix:	Storm Water		
Collect Date:	07-NOV-24 08:25		
Receive Date:	07-NOV-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
GEL Field Crew pH (SCID 10585) "As Received"												
Field pH		7.80			SU			AXM8	11/07/24	0825	2702034	1
Nutrient Analysis												
EPA 351.2, Nitrogen, Total Kjeldahl (TKN) "As Received"												
Nitrogen, Total Kjeldahl		0.990	0.0330	0.100	mg/L	1.00	1	AXH3	11/14/24	0556	2703489	2
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.0289	0.00700	0.0200	mg/L		1	JLD1	11/08/24	1513	2702136	3
EPA 365.4 Phosphorus, Total "As Received"												
Phosphorus, Total as P		0.310	0.0200	0.0500	mg/L	1.00	1	JLD1	11/13/24	1249	2703491	4
Total Nitrogen Calculation "See Parent Products"												
Total Nitrogen		1.02	0.0330	0.100	mg/L		1	AXH3	11/14/24	0718	2702123	5
Oil & Grease Analysis												
EPA 1664A/B n-Hexane Extractable Material (O&G) "As Received"												
Oil and Grease		6.42	1.32	4.72	mg/L			CH6	11/27/24	1458	2712787	6
Solids Analysis												
SM 2540D Total Suspended Solids (TSS) "As Received"												
Total Suspended Solids		44.0	5.70	25.0	mg/L			KLP1	11/14/24	1128	2705918	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	AXH3	11/13/24	1115	2703484
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXH3	11/13/24	1115	2703490

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 351.2	
3	EPA 353.2 Low Level	
4	EPA 365.4	
5	Calculation	
6	EPA 1664A/1664B	
7	SM 2540D	

Notes:

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-6	Project:	CIOP00124
Sample ID:	694581002	Client ID:	CIOP001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-7	Project:	CIOP00124
Sample ID:	694581003	Client ID:	CIOP001
Matrix:	Storm Water		
Collect Date:	07-NOV-24 08:45		
Receive Date:	07-NOV-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
GEL Field Crew pH (SCID 10585) "As Received"												
Field pH		7.50			SU			AXM8	11/07/24	0845	2702034	1
Nutrient Analysis												
EPA 351.2, Nitrogen, Total Kjeldahl (TKN) "As Received"												
Nitrogen, Total Kjeldahl		1.18	0.0330	0.100	mg/L	1.00	1	AXH3	11/14/24	0604	2703489	2
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.0952	0.00700	0.0200	mg/L		1	JLD1	11/08/24	1514	2702136	3
EPA 365.4 Phosphorus, Total "As Received"												
Phosphorus, Total as P		0.636	0.0200	0.0500	mg/L	1.00	1	JLD1	11/13/24	1250	2703491	4
Total Nitrogen Calculation "See Parent Products"												
Total Nitrogen		1.27	0.0330	0.100	mg/L		1	AXH3	11/14/24	0718	2702123	5
Oil & Grease Analysis												
EPA 1664A/B n-Hexane Extractable Material (O&G) "As Received"												
Oil and Grease	J	1.42	1.32	4.72	mg/L			CH6	11/27/24	1458	2712787	6
Solids Analysis												
SM 2540D Total Suspended Solids (TSS) "As Received"												
Total Suspended Solids		26.0	5.70	25.0	mg/L			KLP1	11/14/24	1128	2705918	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	AXH3	11/13/24	1115	2703484
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXH3	11/13/24	1115	2703490

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 351.2	
3	EPA 353.2 Low Level	
4	EPA 365.4	
5	Calculation	
6	EPA 1664A/1664B	
7	SM 2540D	

Notes:

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-7	Project:	CIOP00124
Sample ID:	694581003	Client ID:	CIOP001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-13	Project:	CIOP00124
Sample ID:	694581004	Client ID:	CIOP001
Matrix:	Storm Water		
Collect Date:	07-NOV-24 09:15		
Receive Date:	07-NOV-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
GEL Field Crew pH (SCID 10585) "As Received"												
Field pH		8.00			SU			AXM8	11/07/24	0915	2702034	1
Nutrient Analysis												
EPA 351.2, Nitrogen, Total Kjeldahl (TKN) "As Received"												
Nitrogen, Total Kjeldahl		1.75	0.0330	0.100	mg/L	1.00	1	AXH3	11/14/24	0605	2703489	2
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		1.61	0.0350	0.100	mg/L		5	JLD1	11/08/24	1515	2702136	3
EPA 365.4 Phosphorus, Total "As Received"												
Phosphorus, Total as P		0.695	0.0200	0.0500	mg/L	1.00	1	JLD1	11/13/24	1251	2703491	4
Total Nitrogen Calculation "See Parent Products"												
Total Nitrogen		3.36	0.0350	0.100	mg/L		1	AXH3	11/14/24	0718	2702123	5
Oil & Grease Analysis												
EPA 1664A/B n-Hexane Extractable Material (O&G) "As Received"												
Oil and Grease	U	ND	1.35	4.81	mg/L			CH6	11/27/24	1458	2712787	6
Solids Analysis												
SM 2540D Total Suspended Solids (TSS) "As Received"												
Total Suspended Solids	J	7.20	2.28	10.0	mg/L			KLP1	11/14/24	1128	2705918	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	AXH3	11/13/24	1115	2703484
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXH3	11/13/24	1115	2703490

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 351.2	
3	EPA 353.2 Low Level	
4	EPA 365.4	
5	Calculation	
6	EPA 1664A/1664B	
7	SM 2540D	

Notes:

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-13	Project:	CIOP00124
Sample ID:	694581004	Client ID:	CIOP001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-14	Project:	CIOP00124
Sample ID:	694581005	Client ID:	CIOP001
Matrix:	Storm Water		
Collect Date:	07-NOV-24 09:30		
Receive Date:	07-NOV-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
GEL Field Crew pH (SCID 10585) "As Received"												
Field pH		7.70			SU			AXM8	11/07/24	0930	2702034	1
Nutrient Analysis												
EPA 351.2, Nitrogen, Total Kjeldahl (TKN) "As Received"												
Nitrogen, Total Kjeldahl		1.10	0.0330	0.100	mg/L	1.00	1	AXH3	11/14/24	0606	2703489	2
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.276	0.00700	0.0200	mg/L		1	JLD1	11/08/24	1517	2702136	3
EPA 365.4 Phosphorus, Total "As Received"												
Phosphorus, Total as P		0.579	0.0200	0.0500	mg/L	1.00	1	JLD1	11/13/24	1258	2703491	4
Total Nitrogen Calculation "See Parent Products"												
Total Nitrogen		1.38	0.0330	0.100	mg/L		1	AXH3	11/14/24	0718	2702123	5
Oil & Grease Analysis												
EPA 1664A/B n-Hexane Extractable Material (O&G) "As Received"												
Oil and Grease	U	ND	1.35	4.81	mg/L			CH6	11/27/24	1458	2712787	6
Solids Analysis												
SM 2540D Total Suspended Solids (TSS) "As Received"												
Total Suspended Solids	J	5.60	2.28	10.0	mg/L			KLP1	11/14/24	1128	2705918	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	AXH3	11/13/24	1115	2703484
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXH3	11/13/24	1115	2703490

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 351.2	
3	EPA 353.2 Low Level	
4	EPA 365.4	
5	Calculation	
6	EPA 1664A/1664B	
7	SM 2540D	

Notes:

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-14	Project:	CIOP00124
Sample ID:	694581005	Client ID:	CIOP001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-16	Project:	CIOP00124
Sample ID:	694581006	Client ID:	CIOP001
Matrix:	Storm Water		
Collect Date:	07-NOV-24 09:55		
Receive Date:	07-NOV-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
GEL Field Crew pH (SCID 10585) "As Received"												
Field pH		7.50			SU			AXM8	11/07/24	0955	2702034	1
Nutrient Analysis												
EPA 351.2, Nitrogen, Total Kjeldahl (TKN) "As Received"												
Nitrogen, Total Kjeldahl	J	0.0920	0.0330	0.100	mg/L	1.00	1	AXH3	11/14/24	0608	2703489	2
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.0556	0.00700	0.0200	mg/L		1	JLD1	11/08/24	1522	2702136	3
EPA 365.4 Phosphorus, Total "As Received"												
Phosphorus, Total as P		0.126	0.0200	0.0500	mg/L	1.00	1	JLD1	11/13/24	1414	2703491	4
Total Nitrogen Calculation "See Parent Products"												
Total Nitrogen		0.148	0.0330	0.100	mg/L		1	AXH3	11/14/24	0718	2702123	5
Oil & Grease Analysis												
EPA 1664A/B n-Hexane Extractable Material (O&G) "As Received"												
Oil and Grease	U	ND	1.32	4.72	mg/L			CH6	11/27/24	1458	2712787	6
Solids Analysis												
SM 2540D Total Suspended Solids (TSS) "As Received"												
Total Suspended Solids		21.5	2.85	12.5	mg/L			KLP1	11/14/24	1128	2705918	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	AXH3	11/13/24	1115	2703484
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXH3	11/13/24	1115	2703490

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 351.2	
3	EPA 353.2 Low Level	
4	EPA 365.4	
5	Calculation	
6	EPA 1664A/1664B	
7	SM 2540D	

Notes:

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-16	Project:	CIOP00124
Sample ID:	694581006	Client ID:	CIOP001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-17	Project:	CIOP00124
Sample ID:	694581007	Client ID:	CIOP001
Matrix:	Storm Water		
Collect Date:	07-NOV-24 10:15		
Receive Date:	07-NOV-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
GEL Field Crew pH (SCID 10585) "As Received"												
Field pH		8.10			SU			AXM8	11/07/24	1015	2702034	1
Nutrient Analysis												
EPA 351.2, Nitrogen, Total Kjeldahl (TKN) "As Received"												
Nitrogen, Total Kjeldahl		2.40	0.0330	0.100	mg/L	1.00	1	AXH3	11/14/24	0609	2703489	2
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.0584	0.00700	0.0200	mg/L		1	JLD1	11/08/24	1524	2702136	3
EPA 365.4 Phosphorus, Total "As Received"												
Phosphorus, Total as P		1.21	0.0200	0.0500	mg/L	1.00	1	JLD1	11/13/24	1300	2703491	4
Total Nitrogen Calculation "See Parent Products"												
Total Nitrogen		2.46	0.0330	0.100	mg/L		1	AXH3	11/14/24	0718	2702123	5
Oil & Grease Analysis												
EPA 1664A/B n-Hexane Extractable Material (O&G) "As Received"												
Oil and Grease	U	ND	1.35	4.81	mg/L			CH6	11/27/24	1458	2712787	6
Solids Analysis												
SM 2540D Total Suspended Solids (TSS) "As Received"												
Total Suspended Solids		34.0	5.70	25.0	mg/L			KLP1	11/14/24	1128	2705918	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	AXH3	11/13/24	1115	2703484
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXH3	11/13/24	1115	2703490

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 351.2	
3	EPA 353.2 Low Level	
4	EPA 365.4	
5	Calculation	
6	EPA 1664A/1664B	
7	SM 2540D	

Notes:

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-17	Project:	CIOP00124
Sample ID:	694581007	Client ID:	CIOP001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-18	Project:	CIOP00124
Sample ID:	694581008	Client ID:	CIOP001
Matrix:	Storm Water		
Collect Date:	07-NOV-24 10:35		
Receive Date:	07-NOV-24		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Field Data												
GEL Field Crew pH (SCID 10585) "As Received"												
Field pH		8.00			SU			AXM8	11/07/24	1035	2702034	1
Nutrient Analysis												
EPA 351.2, Nitrogen, Total Kjeldahl (TKN) "As Received"												
Nitrogen, Total Kjeldahl		0.631	0.0330	0.100	mg/L	1.00	1	AXH3	11/14/24	0610	2703489	2
EPA 353.2 Nitrogen, Nitrate/Nitrite "As Received"												
Nitrogen, Nitrate/Nitrite		0.143	0.00700	0.0200	mg/L		1	JLD1	11/08/24	1525	2702136	3
EPA 365.4 Phosphorus, Total "As Received"												
Phosphorus, Total as P		0.577	0.0200	0.0500	mg/L	1.00	1	JLD1	11/13/24	1301	2703491	4
Total Nitrogen Calculation "See Parent Products"												
Total Nitrogen		0.774	0.0330	0.100	mg/L		1	AXH3	11/14/24	0718	2702123	5
Oil & Grease Analysis												
EPA 1664A/B n-Hexane Extractable Material (O&G) "As Received"												
Oil and Grease	J	4.34	1.32	4.72	mg/L			CH6	11/27/24	1458	2712787	6
Solids Analysis												
SM 2540D Total Suspended Solids (TSS) "As Received"												
Total Suspended Solids	J	4.00	2.28	10.0	mg/L			KLP1	11/14/24	1128	2705918	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXH3	11/13/24	1115	2703490
EPA 351.2 Prep	EPA 351.2 Total Kjeldahl Nitrogen Prep	AXH3	11/13/24	1115	2703484

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SM 4500-H B/SW846 9040C, SM 2550B	
2	EPA 351.2	
3	EPA 353.2 Low Level	
4	EPA 365.4	
5	Calculation	
6	EPA 1664A/1664B	
7	SM 2540D	

Notes:

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Certificate of Analysis

Report Date: November 29, 2024

Company :	City of Isle of Palms
Address :	1207 Palm Blvd
	Isle of Palms, South Carolina 29451
Contact:	Matt Simms
Project:	IOP Baseline Water QMP

Client Sample ID:	SW-18	Project:	CIOP00124
Sample ID:	694581008	Client ID:	CIOP001

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration
Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

QC Summary

Report Date: November 29, 2024

City of Isle of Palms
1207 Palm Blvd
Isle of Palms, South Carolina

Contact: **Matt Simms**

Workorder: **694581**

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date Time
Nutrient Analysis										
Batch 2702136										
QC1205913170 694581001 DUP										
Nitrogen, Nitrate/Nitrite		0.370		0.370	mg/L	0		(0%-20%)	JLD1	11/08/24 15:11
QC1205912658 LCS										
Nitrogen, Nitrate/Nitrite	1.00			0.984	mg/L		98.4	(90%-110%)		11/08/24 15:07
QC1205912657 MB										
Nitrogen, Nitrate/Nitrite			U	ND	mg/L					11/08/24 15:06
QC1205913171 694581001 PS										
Nitrogen, Nitrate/Nitrite	1.00	0.370		1.33	mg/L		96	(90%-110%)		11/08/24 15:12
Batch 2703489										
QC1205915461 694141001 DUP										
Nitrogen, Total Kjeldahl		0.987		0.955	mg/L	3.3		(0%-20%)	AXH3	11/14/24 05:33
QC1205915458 LCS										
Nitrogen, Total Kjeldahl	1.00			0.957	mg/L		95.7	(90%-110%)		11/14/24 05:27
QC1205915457 MB										
Nitrogen, Total Kjeldahl			U	ND	mg/L					11/14/24 05:26
QC1205915462 694141001 MS										
Nitrogen, Total Kjeldahl	1.00	0.987		2.21	mg/L		122*	(90%-110%)		11/14/24 05:34
Batch 2703491										
QC1205915468 692962002 DUP										
Phosphorus, Total as P	U	ND	U	ND	mg/L	N/A			JLD1	11/13/24 12:27

QC Summary

Workorder: 694581

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date Time
Nutrient Analysis										
Batch 2703491										
QC1205915467 LCS										
Phosphorus, Total as P	1.00			1.01	mg/L		101	(83%-122%)	JLD1	11/13/24 12:19
QC1205915466 MB										
Phosphorus, Total as P			U	ND	mg/L					11/13/24 12:18
QC1205915469 692962002 MS										
Phosphorus, Total as P	1.00 U	ND		0.994	mg/L		99.4	(66%-137%)		11/13/24 12:28
Oil & Grease Analysis										
Batch 2712787										
QC1205933411 LCS										
Oil and Grease	40.0			37.1	mg/L		92.8	(76%-104%)	CH6	11/27/24 14:58
QC1205933410 MB										
Oil and Grease			U	ND	mg/L					11/27/24 14:58
QC1205933412 693753001 MS										
Oil and Grease	38.5 U	ND		34.5	mg/L		89.5	(77%-108%)		11/27/24 14:58
QC1205933413 693753001 MSD										
Oil and Grease	38.5 U	ND		28.8	mg/L	17.9	74.7*	(0%-20%)		11/27/24 14:58
Solids Analysis										
Batch 2705918										
QC1205920033 694573001 DUP										
Total Suspended Solids	U	ND	U	ND	mg/L	N/A			KLP1	11/14/24 11:28
QC1205920032 LCS										
Total Suspended Solids	500			501	mg/L		100	(95%-105%)		11/14/24 11:28
QC1205920031 MB										
Total Suspended Solids			U	ND	mg/L					11/14/24 11:28

QC Summary

Workorder: **694581**

Parmname	NOM	Sample	Qual	QC	Units	RPD/D%	REC%	Range	Anlst	Date	Time

Notes:

The Qualifiers in this report are defined as follows:

U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
J	Value is estimated
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
H	Analytical holding time was exceeded
<	Result is less than value reported
>	Result is greater than value reported
h	Preparation or preservation holding time was exceeded
R	Sample results are rejected
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
N/A	RPD or %Recovery limits do not apply.
ND	Analyte concentration is not detected above the detection limit
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
E	General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
N1	See case narrative
R	Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
B	The target analyte was detected in the associated blank.
e	5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes
J	See case narrative for an explanation

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Page: ____ of ____
Project #: GLAB01024
GEL Quote #:
COC Number [1]:
PO Number:

GEL Laboratories LLC
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Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

694581

Chain of Custody and Analytical Request

GEL Work Order Number:
GEL Project Manager:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

Client Name: GEL Labs
Phone #
Project/Site Name: IOP Water Quality
Fax #
Address: Isle of Palms, SC
Collected By: Client (T. Nash) Send Results To: Jake Crook

Sample ID (* For composites - indicate start and stop date/time)	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code [2]	Field Filtered [3]	Sample Matrix [4]	Should this sample be considered: Radioactive (Please supply isotopic info.)	Should this sample be considered: (7) Known or possible hazards	Total number of containers	HA O&G	SA TSS	SA Total Nitrogen, Total Phos	<-- Preservative Type (6) Comments Note: extra sample is required for sample specific QC
SW-2	11/7/24	0800	G	N	SW			4	2	1	1	Field pH: 7.4
SW-6		0825						4	2	1	1	Field pH: 7.8
SW-7		0845						4	2	1	1	Field pH: 7.5
SW-13		0915						4	2	1	1	Field pH: 8.0
SW-14		0930						4	2	1	1	Field pH: 7.7
SW-16		0955						4	2	1	1	Field pH: 7.5
SW-17		1015						4	2	1	1	Field pH: 8.1
SW-18	-	1035	-	-	-			4	2	1	1	Field pH: 8.0

Sample Analysis Requested [5] (Fill in the number of containers for each test)

Chain of Custody Signatures

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1	11/7/24	1230	Erin Strahant	11/7/24	1230
2			2		
3			3		

TAT Requested: Normal: ✓ Rush: ____ Specify: ____ (Subject to Surcharge)

Fax Results: [ ] Yes [ ] No

Select Deliverable: [ ] C of A [ ] QC Summary [ ] level 1 [ ] Level 2 [ ] Level 3 [ ] Level 4

Additional Remarks:

For Lab Receiving Use Only: *Custody Seal Intact?* [ ] Yes [ ] No ***Cooler Temp:*** 2 °C

> ***For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)***

Sample Collection Time Zone: [ ] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other: ____

1.) Chain of Custody Number = Client Determined

2.) QC Codes: **N** = Normal Sample, **TB** = Trip Blank, **FD** = Field Duplicate, **EB** = Equipment Blank, **MS** = Matrix Spike Sample, **MSD** = Matrix Spike Duplicate Sample, **G** = Grab, **C** = Composite

3.) Field Filtered: For liquid matrices, indicate with a **- Y -** for yes the sample was field filtered or **- N -** for sample was not field filtered.

4.) Matrix Codes: **DW**=Drinking Water, **GW**=Groundwater, **SW**=Surface Water, **WW**=Waste Water, **W**=Water, **ML**=Misc Liquid, **SO**=Soil, **SD**=Sediment, **SL**=Sludge, **SS**=Solid Waste, **O**=Oil, **F**=Filter, **P**=Wipe, **U**=Urine, **F**=Fecal, **N**=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. **8260B**, **6010B/7470A**) and number of containers provided for each (i.e. *8260B* - **3**, *6010B/7470A* - **1**).

6.) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) *Are there any known or possible hazards associated with these samples?*

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

Listed Waste
LW= Listed Waste
(F,K,P and U-listed wastes.)
Waste code(s):

Other
OT= Other / Unknown
(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
Description:

Please provide any additional details below regarding handling and/or disposal concerns. *(i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)*

RCRA Metals
As = Arsenic **Hg**= Mercury
Ba = Barium **Se**= Selenium
Cd = Cadmium **Ag**= Silver
Cr = Chromium **MR**= Miscellaneous RCRA metals
Pb = Lead

TSCA Regulated
PCB = Polychlorinated biphenyls

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: CIOP	SDG/AR/COC/Work Order: 694581 SC
Received By: Thyasia Tatum	Date Received: 11-7-24
Carrier and Tracking Number	Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information	Yes	No	
			*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A)Shipped as a DOT Hazardous?		✓	Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes___ No___
B) Did the client designate the samples are to be received as radioactive?		✓	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		✓	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?		✓	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		✓	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	✓			Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	✓			Preservation Method: Wet Ice Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius TEMP: 2C
4	Daily check performed and passed on IR temperature gun?	✓			Temperature Device Serial #: IR2-23 Secondary Temperature Device Serial # (If Applicable):
5	Sample containers intact and sealed?	✓			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	✓			Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?			✓	If Yes, are Encores or Soil Kits present for solids? Yes___ No___ NA___(If yes, take to VOA Freezer) Do liquid VOA vials contain acid preservation? Yes___ No___ NA___(If unknown, select No) Are liquid VOA vials free of headspace? Yes___ No___ NA___ Sample ID's and containers affected:
8	Samples received within holding time?	✓			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	✓			ID's and containers affected:
10	Date & time on COC match date & time on bottles?	✓			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	✓			Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	✓			
13	COC form is properly signed in relinquished/received sections?	✓			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials AM Date 11/14/24 Page 1 of 1

GL-CHL-SR-001 Rev 7

TRIDENT LABS SERVICES, INC.
ANALYTICAL LABORATORY
Soil, Water, Wastewater & Industrial Chemical Analysis
9104 Canvas Lane △ Ladson, South Carolina 29456
Telephone (843) 871-4999 △ Fax (843) 875-2266
e-mail: tls@tridentlabs.com

REPORT OF ANALYSIS

GEL Laboratories LLC
2040 Savage Rd.
Charleston, SC 29407

Report Date: 11/08/24

Sampled: 11/07/24 08:00
Collected By: JC
Sample Matrix: SFW
1 of 8

Received: 11/07/24 11:55
Received By: DWH

Sample Id: 0244205
Sample Number(s): 296426 - 296427
Project Name: GLAB01024
Location: SW- 2

ANALYSIS	METHOD	RESULT	UNITS	DATE/TIME	ANALYST
Sample Type: Grab					
EColi (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Total Coliform (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Fecal Coliform(Colilert-18)	Colilert-18 (2010)	2420	MPN/100 ml	11/07/24 13:00	MBL

LABORATORY I.D. NO. 10122
REPORT APPROVED BY: Amanda Turner

TRIDENT LABS SERVICES, INC.
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REPORT OF ANALYSIS

GEL Laboratories LLC
2040 Savage Rd.
Charleston, SC 29407

Report Date: 11/08/24

Sampled: 11/07/24 08:25
Collected By: JC
Sample Matrix: SFW
2 of 8

Received: 11/07/24 11:55
Received By: DWH

Sample Id: 0244205
Sample Number(s): 296428 - 296429
Project Name: GLAB01024
Location: SW- 6

ANALYSIS	METHOD	RESULT	UNITS	DATE/TIME	ANALYST
Sample Type: Grab					
EColi (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Total Coliform (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Fecal Coliform(Colilert-18)	Colilert-18 (2010)	> 2420	MPN/100 ml	11/07/24 13:00	MBL

LABORATORY I.D. NO. 10122
REPORT APPROVED BY: Melinda Lewis

TRIDENT LABS SERVICES, INC.
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REPORT OF ANALYSIS

GEL Laboratories LLC
2040 Savage Rd.
Charleston, SC 29407

Report Date: 11/08/24

Sampled: 11/07/24 08:45
Collected By: JC
Sample Matrix: SFW
3 of 8

Received: 11/07/24 11:55
Received By: DWH

Sample Id: 0244205
Sample Number(s): 296430 - 296431
Project Name: GLAB01024
Location: SW- 7

ANALYSIS	METHOD	RESULT	UNITS	DATE/TIME	ANALYST
Sample Type: Grab					
EColi (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Total Coliform (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Fecal Coliform(Colilert-18)	Colilert-18 (2010)	> 2420	MPN/100 ml	11/07/24 13:00	MBL

LABORATORY I.D. NO. 10122
REPORT APPROVED BY: Melinda Lewis

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REPORT OF ANALYSIS

GEL Laboratories LLC
2040 Savage Rd.
Charleston, SC 29407

Report Date: 11/08/24

Sampled: 11/07/24 09:15
Collected By: JC
Sample Matrix: SFW
4 of 8

Received: 11/07/24 11:55
Received By: DWH

Sample Id: 0244205
Sample Number(s): 296432 - 296433
Project Name: GLAB01024
Location: SW- 13

ANALYSIS	METHOD	RESULT	UNITS	DATE/TIME	ANALYST
Sample Type: Grab					
EColi (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Total Coliform (MPN)	SM 9223B (2016)	2420	MPN/100 ml	11/07/24 13:00	MBL
Fecal Coliform(Colilert-18)	Colilert-18 (2010)	1120	MPN/100 ml	11/07/24 13:00	MBL

LABORATORY I.D. NO. 10122
REPORT APPROVED BY:

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REPORT OF ANALYSIS

GEL Laboratories LLC
2040 Savage Rd.
Charleston, SC 29407

Report Date: 11/08/24

Sampled: 11/07/24 09:30
Collected By: JC
Sample Matrix: SFW
5 of 8

Received: 11/07/24 11:55
Received By: DWH

Sample Id: 0244205
Sample Number(s): 296434 - 296435
Project Name: GLAB01024
Location: SW- 14

ANALYSIS	METHOD	RESULT	UNITS	DATE/TIME	ANALYST
Sample Type: Grab					
EColi (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Total Coliform (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Fecal Coliform(Colilert-18)	Colilert-18 (2010)	> 2420	MPN/100 ml	11/07/24 13:00	MBL

LABORATORY I.D. NO. 10122
REPORT APPROVED BY: Melinda Lewis

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REPORT OF ANALYSIS

GEL Laboratories LLC
2040 Savage Rd.
Charleston, SC 29407

Report Date: 11/08/24

Sampled: 11/07/24 09:55
Collected By: JC
Sample Matrix: SFW
6 of 8

Received: 11/07/24 11:55
Received By: DWH

Sample Id: 0244205
Sample Number(s): 296436 - 296437
Project Name: GLAB01024
Location: SW- 16

ANALYSIS	METHOD	RESULT	UNITS	DATE/TIME	ANALYST
Sample Type: Grab					
EColi (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Total Coliform (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Fecal Coliform(Colilert-18)	Colilert-18 (2010)	21	MPN/100 ml	11/07/24 13:00	MBL

LABORATORY I.D. NO. 10122
REPORT APPROVED BY: Melinda Lund

TRIDENT LABS SERVICES, INC.
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REPORT OF ANALYSIS

GEL Laboratories LLC
2040 Savage Rd.
Charleston, SC 29407

Report Date: 11/08/24

Sampled: 11/07/24 10:15
Collected By: JC
Sample Matrix: SFW
7 of 8

Received: 11/07/24 11:55
Received By: DWH

Sample Id: 0244205
Sample Number(s): 296438 - 296439
Project Name: GLAB01024
Location: SW- 17

ANALYSIS	METHOD	RESULT	UNITS	DATE/TIME	ANALYST
Sample Type: Grab					
EColi (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Total Coliform (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Fecal Coliform(Colilert-18)	Colilert-18 (2010)	> 2420	MPN/100 ml	11/07/24 13:00	MBL

LABORATORY I.D. NO. 10122
REPORT APPROVED BY: Melinda Lewis

TRIDENT LABS SERVICES, INC.
ANALYTICAL LABORATORY
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REPORT OF ANALYSIS

GEL Laboratories LLC
2040 Savage Rd.
Charleston, SC 29407

Report Date: 11/08/24

Sampled: 11/07/24 10:35
Collected By: JC
Sample Matrix: SFW
8 of 8

Received: 11/07/24 11:55
Received By: DWH

Sample Id: 0244205
Sample Number(s): 296440 - 296441
Project Name: GLAB01024
Location: SW- 18

ANALYSIS	METHOD	RESULT	UNITS	DATE/TIME	ANALYST
Sample Type: Grab					
EColi (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Total Coliform (MPN)	SM 9223B (2016)	> 2420	MPN/100 ml	11/07/24 13:00	MBL
Fecal Coliform(Colilert-18)	Colilert-18 (2010)	574	MPN/100 ml	11/07/24 13:00	MBL

LABORATORY I.D. NO. 10122
REPORT APPROVED BY: Melinda Lee

Page: ___ of ___
Project #: GL. 01024
GEL Quote #:
COC Number (1):
PO Number:

GEL Laboratories LLC
gel.com
Chemistry | Radiochemistry | Radiobioassay | Specialty Analytics

Chain of Custody and Analytical Request

GEL Work Order Number: | **GEL Project Manager:**

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
Phone: (843) 556-8171
Fax: (843) 766-1178

0244205

Client Name: GEL Labs | Phone #
Project/Site Name: IOP Water Quality | Fax #
Address: Isle of Palms, SC
Collected By: Client (T. Nail) | Send Results To: Jake Crook (GEL)

Sample Analysis Requested (5) (Fill in the number of containers for each test)

Sample ID * For composites - indicate start and stop date/time	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered: Radioactive *Please supply isotopic info*	(7) Known or possible hazards	Total number of containers	Total Coliform (ST)	Fecal Coliform (ST)								Comments Note: extra sample is required for sample specific QC
																		<-- Preservative Type (6)
SW-2	11/7/24	0800	G	N	SW			2	1	1						296426/296427		* Do not
SW-6		0825						2	1	1						296428/296429		over dilute *
SW-7		0845						2	1	1								296430/296431
SW-13		0915						2	1	1								296432/296433
SW-14		0930						2	1	1								296434/296435
SW-16		0955						2	1	1								296436/296437
SW-17		1015						2	1	1								296438/296439
SW-18	-	1035	-	-	-			2	1	1								296440/296441

Chain of Custody Signatures

	Relinquished By (Signed)	Date	Time		Received by (signed)	Date	Time
1	[signature]	11/7/24	1150	1	[signature]	11/7	1150
2				2			
3				3			

TAT Requested: Normal: ✓ Rush: ___ Specify: ___ **(Subject to Surcharge)**

Fax Results: [ ] Yes [ ] No

Select Deliverable: [ ] C of A [ ] QC Summary [ ] level 1 [ ] Level 2 [ ] Level 3 [ ] Level 4

Additional Remarks:

For Lab Receiving Use Only: *Custody Seal Intact?* [X] Yes [ ] No ***Cooler Temp:*** 2 °C

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

Sample Collection Time Zone: [ ] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other: ___

1.) Chain of Custody Number = Client Determined

2.) QC Codes: **N** = Normal Sample, **TB** = Trip Blank, **FD** = Field Duplicate, **EB** = Equipment Blank, **MS** = Matrix Spike Sample, **MSD** = Matrix Spike Duplicate Sample, **G** = Grab, **C** = Composite

3.) Field Filtered: For liquid matrices, indicate with a **- Y -** for yes the sample was field filtered or **- N -** for sample was not field filtered.

4.) Matrix Codes: **DW**=Drinking Water, **GW**=Groundwater, **SW**=Surface Water, **WW**=Waste Water, **W**=Water, **ML**=Misc Liquid, **SO**=Soil, **SD**=Sediment, **SL**=Sludge, **SS**=Solid Waste, **O**=Oil, **F**=Filter, **P**=Wipe, **U**=Urine, **F**=Fecal, **N**=Nasal

5.) Sample Analysis Requested: Analytical method requested (i.e. **8260B, 6010B/7470A**) and number of containers provided for each (i.e. *8260B* - **3**, *6010B/7470A* - **1**).

6.) Preservative Type: **HA** = Hydrochloric Acid, **NI** = Nitric Acid, **SH** = Sodium Hydroxide, **SA** = Sulfuric Acid, **AA** = Ascorbic Acid, **HX** = Hexane, **ST** = Sodium Thiosulfate, If no preservative is added = leave field blank

7.) *Are there any known or possible hazards associated with these samples?*

Characteristic Hazards
FL = Flammable/Ignitable
CO = Corrosive
RE = Reactive

Listed Waste
LW= Listed Waste
(F,K,P and U-listed wastes.)
Waste code(s):

Other
OT= Other / Unknown
(i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)
Description:

Please provide any additional details below regarding handling and/or disposal concerns. *(i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)*

RCRA Metals
As = Arsenic, Hg= Mercury
Ba = Barium, Se= Selenium
Cd = Cadmium, Ag= Silver
Cr = Chromium, MR= Miscellaneous
Pb = Lead, RCRA metals

TSCA Regulated
PCB = Polychlorinated biphenyls

Trident Labs, Inc. Chain of Custody Discrepancy Report

Chain of Custody # 0244205

Discrepancies Noted

_____ Incomplete collection Information-Circle the dicrepancies
Date Time Analysis Required Matrix Location

_____ No collector's signature

_____ Incorrect preservatives for _____

_____ Incorrect sample container for _____

_____ No sample provided for _____

_____ Broken containers for _____

_____ Incorrect transport temperature

_____ No Chain of Custody provided with samples

_____ pH checked at Log In out of limit. pH adjusted to _____

_____ Other _____

_____

_____

Corrective Action

Client Notified By _____

Date _____

Time _____

Contact _____

Corrective Action Taken

_____

_____

_____

_____ No discrepancies noted

List of current GEL Certifications as of 29 November 2024

State	Certification
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
Arkansas	88-00651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	KY90129
Kentucky Wastewater	KY90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2023019
Maryland	270
Massachusetts	M-SC012
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	NV-C24-00175
New Hampshire NELAP	205424
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2023-152
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235
Utah NELAP	SC000122024-43
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

General Chemistry

Product: **Total Nitrogen**
Analytical Method: Calculation
Analytical Procedure: GL-GC-E-107 REV# 11
Analytical Batch: 2702123

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
694581001	SW-2
694581002	SW-6
694581003	SW-7
694581004	SW-13
694581005	SW-14
694581006	SW-16
694581007	SW-17
694581008	SW-18

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Product: **Nitrate/Nitrite Cad Redux Low Level**
Analytical Method: EPA 353.2 Low Level
Analytical Procedure: GL-GC-E-128 REV# 16
Analytical Batch: 2702136

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
694581001	SW-2
694581002	SW-6
694581003	SW-7
694581004	SW-13
694581005	SW-14
694581006	SW-16
694581007	SW-17
694581008	SW-18
1205912657	Method Blank (MB)
1205912658	Laboratory Control Sample (LCS)
1205913170	694581001(SW-2) Sample Duplicate (DUP)
1205913171	694581001(SW-2) Post Spike (PS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Dilutions
The following sample 694581004 (SW-13) was diluted because target analyte concentrations exceeded the calibration range. Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range.

Analyte	694581 004
Nitrogen, Nitrate/Nitrite	5X

Product: **Total Kjeldahl Nitrogen**
Analytical Method: EPA 351.2
Analytical Procedure: GL-GC-E-104 REV# 16
Analytical Batch: 2703489

Preparation Method: EPA 351.2 Prep
Preparation Procedure: GL-GC-E-071 REV# 20
Preparation Batch: 2703484

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
694581001	SW-2
694581002	SW-6
694581003	SW-7
694581004	SW-13
694581005	SW-14
694581006	SW-16
694581007	SW-17
694581008	SW-18
1205915457	Method Blank (MB)
1205915458	Laboratory Control Sample (LCS)
1205915461	694141001(NonSDG) Sample Duplicate (DUP)
1205915462	694141001(NonSDG) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The percent recoveries (%R) obtained from the spike analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The matrix spike recovered outside of the established acceptance limits due to matrix interference and/or non-homogeneity.

Analyte	Sample	Value
Nitrogen, Total Kjeldahl	1205915462 (Non SDG 694141001MS)	122* (90%-110%)

Product: **Total Phosphorus**
Analytical Method: EPA 365.4
Analytical Procedure: GL-GC-E-113 REV# 2
Analytical Batch: 2703491

Preparation Method: EPA 365.4 Prep
Preparation Procedure: GL-GC-E-071 REV# 20
Preparation Batch: 2703490

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
694581001	SW-2
694581002	SW-6
694581003	SW-7
694581004	SW-13
694581005	SW-14
694581006	SW-16
694581007	SW-17
694581008	SW-18
1205915466	Method Blank (MB)
1205915467	Laboratory Control Sample (LCS)
1205915468	692962002(NonSDG) Sample Duplicate (DUP)
1205915469	692962002(NonSDG) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Sample Re-analysis
Sample was re-analyzed due to over dilution. 694581006 (SW-16).

Product: **n-Hexane Extractable Material**
Analytical Method: EPA 1664A/1664B

Analytical Procedure: GL-GC-E-094 REV# 20
Analytical Batch: 2712787

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
694581001	SW-2
694581002	SW-6
694581003	SW-7
694581004	SW-13
694581005	SW-14
694581006	SW-16
694581007	SW-17
694581008	SW-18
1205933410	Method Blank (MB)
1205933411	Laboratory Control Sample (LCS)
1205933412	693753001(NonSDG) Matrix Spike (MS)
1205933413	693753001(NonSDG) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Quality Control (QC) Information

Matrix Spike (MS)/Post Spike (PS) Recovery Statement
The percent recoveries (%R) obtained from the spike analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The spike recovery falls outside of the established acceptance limits. Since both the spike duplicate recovery and the RPD between the spike and spike duplicate fall within acceptance limits, the data is reported.

Analyte	Sample	Value
Oil and Grease	1205933413 (Non SDG 693753001MSD)	74.7* (77%-108%)

Product: **Solids, Total Suspended**
Analytical Method: SM 2540D
Analytical Procedure: GL-GC-E-012 REV# 20
Analytical Batch: 2705918

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	Client Sample Identification
694581001	SW-2
694581002	SW-6
694581003	SW-7
694581004	SW-13
694581005	SW-14
694581006	SW-16
694581007	SW-17

694581008	SW-18
1205920031	Method Blank (MB)
1205920032	Laboratory Control Sample (LCS)
1205920033	694573001(NonSDG) Sample Duplicate (DUP)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Miscellaneous Information

Additional Comments
A reduced aliquot was used due to limited sample volume. 1205920033 (Non SDG 694573001DUP). Sample filtration took > 10 minutes; therefore as prescribed in the method, a reduced aliquot was used. 694581001 (SW-2), 694581002 (SW-6), 694581003 (SW-7), 694581004 (SW-13), 694581005 (SW-14), 694581006 (SW-16), 694581007 (SW-17) and 694581008 (SW-18).

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

2024 Environmental Advisory Committee Accomplishments

Wildlife and Native Plants

- Hosted a series of free lectures by Sharleen Johnson on gardening with native plants at the IOP Recreation Center during the winter.
- Prepared the plot for the Isle of Palms Native Plant demonstration garden located on the Water Commission's property at Palm and 7th Ave and planted 100 plants of 28 species in March.
- Worked with the City to obtain a wooden sign with a QR code that lists each plant with pictures and a diagram of the garden.
- Obtained copper signs that were used to label the plants.
- Collaborated with Public Works to install two benches, donated by citizens, around the garden and anchor them into the ground.
- Installed 6 purple martin gourds, which were all successfully occupied. Young birds were banded by a licensed bird bander when they reached the right age. Their return is anticipated in the spring.
- Watered and weeded the garden regularly for the remainder of the year.
- Planted a few more species at the end of the season, watered, and performed maintenance on the garden after the plants went to seed in late summer and fall.
- Published articles about 16 different native plants that grow well on the Lowcountry coast in the Island Eye Newspaper to educate citizens in the area.
- Hosted a Shorebird steward program at Sullivans Island was for The Earth Fair event.

Litter and Waste

- Attended / presented EAC information on septic tank maintenance and our composting program at IOP Farmers Market and provided composting bins.
- Spoke with Dennis at the Harris Teeter about offering higher quality belly boards instead those made of Styrofoam. He agreed once the existing supply was depleted.
- Collaborated with community partner to pick up and record beach litter at the 25th Ave beach access over a 2-week period, with trash cans on the beach one week and at the street side of the beach access to determine if there was any significant difference in litter counts over the 2-week period.

- Examined factors that need to be considered with beach litter management including open vs closed containers, location of the containers, aesthetics of the containers, and efficiency of litter management.
- Corresponded with public works managers in other SC beach communities to learn more about how other communities were managing beach litter.
- Collaborated with public works to recommend a closed top container with wheels housed inside a fenced area with the container hidden from view with our beach rules sign at beach accesses and the municipal parking lot.
- Recommended a self-contained roll cart with attractive sides and lid for commercial area.
- Recommended that containers be located at street side for most beach accesses and located behind the dune line on access paths that are ADA accessible.
- Recommended a public relations campaign regarding any change from the current system to facilitate understanding and compliance with beach litter management.
- Installed compost liners at drop off locations.

Water Quality

- Obtained approval and implemented a water quality testing initiative through GEL and Trident to sample and analyze chemicals in runoff at 9 drainage outfalls following a rain event.
- Met with Chris Jordan, the General Manager of the IOP Water & Sewer, Commission, Ryne Phillips from Seamon Whiteside, and Roger Gwynne, a Federal-environmental lobbyist from the Ferguson Group to discuss the possibility of sharing the expense of a Federal-level lobbyist with the Water & Sewer Commission. The City would need to complete an RFP process before moving forward.

Climate Action

- Awarded grant to install solar panels on the public works building; bids obtained by the city and installation scheduled for 2025.
- Requested City Council pass a resolution in support of the Charleston County Climate Action Plan.

Communication

- Assisted with the development and content for the Environmental Initiatives page on the IOP website.
- Provided a short presentation to City Council to summarize accomplishments of the Environmental Advisory Committee for 2023.

Potential Goals for 2025

Wildlife and Native Plants

- Perform ongoing maintenance, watering and weeding as needed of native plant garden.
- Add more gourds for the nesting purple martins. This site was historically occupied by them for years in a wooden bird house put up by the IOP Garden Club. It blew down in Hurricane Hugo and was re-erected in 1990 by Clay Cable and Mary Pringle. In fact, there is a SC Geodedic elevation marker in the ground by the benches calling the location the "Bird House" site. So, it is very fitting to have these beautiful birds nesting there.

Litter and Waste

- Continue our work with Public Works to determine best practice for beach litter management for IOP.

Water Quality

- Continue efforts to promote collaboration between IOP Water and Sewer and the city to seek funding to hasten the conversion to sewer.
- Continue efforts to develop a plan for monitoring the health of existing septic systems.

Climate Action

- Examine ways to reduce light pollution in the city.
- Develop a proactive plan for preserving trees in our community and protecting them from removal.
- Develop incentives to plant trees and native gardens.
- Address the noise and pollution created by leaf blowers.