# **RUMPH'S HILL CREEK E COLI**

Testing conducted by Water and Sewer August 8, 2024 through August 13, 2024

Larry Harper

# Background

Rumph's Hill Creek is designated FW, freshwater stream located in the Santee River Basin. It is not a stream that is designated for recreational use. Regulation 61-68 Water Classifications and Standards, Section G, Item 10 establishes that nor more than 10% of E. Coli samples taken during a 30-day period can exceed 349 MPN/ 100ml for recreational use designation. Item !0 is shown below:

10. Freshwaters are freshwaters suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of the Department. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic community of fauna and flora. Suitable also for industrial and agricultural uses.

| Q                                                                                                                                                                                                                                                               | Quality Standards for Freshwaters                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| ITEMS                                                                                                                                                                                                                                                           | STANDARDS                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |
| a. Garbage, cinders, ashes,<br>oils, sludge, or other refuse                                                                                                                                                                                                    | None allowed.                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |
| <ul> <li>b. Treated wastes, toxic wastes, deleterious substances, colored, or other wastes except those given in a. above.</li> <li>c. Toxic pollutants listed in</li> </ul>                                                                                    | None alone or in combination with other substances or<br>wastes in sufficient amounts to make the waters unsafe or<br>unsuitable for primary contact recreation or to impair the<br>waters for any other best usage as determined for the<br>specific waters which are assigned to this class.<br>As prescribed in Section E of this regulation. |  |  |  |  |  |
| the appendix.                                                                                                                                                                                                                                                   | As presented in Section 1 of this regulation.                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |
| d. Stormwater, and other<br>nonpoint source runoff,<br>including that from<br>agricultural uses, or<br>permitted discharge from<br>aquatic farms,<br>concentrated aquatic<br>animal production<br>facilities, and<br>uncontaminated<br>groundwater from mining. | Allowed if water quality necessary for existing and<br>classified uses shall be maintained and protected consistent<br>with antidegradation rules.                                                                                                                                                                                               |  |  |  |  |  |
| e. Dissolved oxygen.                                                                                                                                                                                                                                            | Daily average not less than 5.0 mg/L with a low of 4.0 mg/L.                                                                                                                                                                                                                                                                                     |  |  |  |  |  |
| f. E. coli                                                                                                                                                                                                                                                      | Not to exceed a geometric mean of 126/100 mL based on at<br>least four (4) samples collected from a given sampling site<br>over a 30-day period, nor shall more than ten percent (10%)<br>of the total samples during any 30-day period exceed<br>349/100 mL.                                                                                    |  |  |  |  |  |
| g. pH.                                                                                                                                                                                                                                                          | Between 6.0 and 8.5.                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |
| h. Temperature.                                                                                                                                                                                                                                                 | As prescribed in E.12. of this regulation.                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |
| i. Turbidity.<br>Except for Lakes.                                                                                                                                                                                                                              | Not to exceed 50 NTUs provided existing uses are maintained.                                                                                                                                                                                                                                                                                     |  |  |  |  |  |

29 | Regulation 61-68

A study of the Santee River Basin by the Department of Environmental Services, formally known as DHEC concluded in its findings from Sampling that:

Bacteria (Fecal coliform bacteria, sampled in water)

- Bacteria levels frequently exceeded South Carolina standards for contact recreation in streams in forested, urban, and agricultural areas.
- Standards were exceeded more frequently in small streams than in large rivers.

Therefore, any concentration of E. Coli higher than 349 MPN/100 ml is not uncommon. Rumph's Hill Creek is shown below.



Rumph's Hill Creek is an urban stream passing through multiple subdivisions and feed by several side streams and from the runoff of residential housing and lots containing large animals.

## Number of Sanitary Sewer Overflows

The Dorchester County Sewer System has only had 11 SSOs in the period of January 1, 2023, to August 9, 2024. Table 1 shows the date and location of the SSOs. All SSOs occurring after July 26, 2024, are related to Tropical Storm Debby. Given the size of the system, 129 Pump Stations and the Lower Dorchester WWTP did not overflow. Eleven(11) SSOs are considered minor. Six of the SSOs are related to Tropical Storm Debby.

| Date      | Location                    | SS0 Amount | Cause                                                          |
|-----------|-----------------------------|------------|----------------------------------------------------------------|
| 1/23/2023 | Sawmill Branch near Jedi Ln | 4,500      | 2" hole in force main<br>from PS 2                             |
| 5/24/2023 | 402 Huntington Rd           | 3,500      | Water from a water line<br>break inundated the<br>sewer system |

| 1/25/2024 | 9600 Dorchester Road            | 3,600               | Break in force main from  |
|-----------|---------------------------------|---------------------|---------------------------|
|           |                                 |                     | PS 1                      |
| 2/12/2024 | End of Isabella Ct, Summerville | 750                 | Heavy rain caused         |
|           |                                 |                     | excessive flow from PS    |
|           |                                 |                     | 66                        |
| 7/26/2024 | Dorchester Rd near Wescott      | 2,000               | Break in force main from  |
|           | Blvd                            |                     | PS 1                      |
| 8/5/2024  | 4446 Scottish Troon Ct          | 36,000              | Malfunction of PS 11      |
|           |                                 |                     | during TS Debby           |
| 8/6/2024  | PS 33                           | 6,000               | Excessive rainfall due to |
|           |                                 |                     | TS Debby                  |
| 8/6/2024  | End of Isabella Ct, Summerville | Evidence of a spill | Excessive rainfall due to |
|           |                                 |                     | TS Debby                  |
| 8/9/2024  | End of Isabella Ct, Summerville | Evidence of a spill | Excessive rainfall due to |
|           |                                 |                     | TS Debby                  |
| 8/9/2024  | 401 Huntington Rd               | Evidence of a spill | Excessive rainfall due to |
|           |                                 |                     | TS Debby                  |
| 8/9/2024  | PS 3, Cone Ln                   | 6,000               | Power failure, generator  |
|           |                                 |                     | failure, and excessive    |
|           |                                 |                     | rainfall due to TS Debby  |

Table 1

# Ms. Arlene Wheeler Complaint

Ms. Elaine Wheeler has complained to DES about what she considers excessive levels of E Coli in Rumph's Hill Creek. She sampled the Creek near her residence and had these samples tested. The following are the test results from November 19, 2023:



1180 Drop Off Drive Suite 101 Summerville, SC 29486 (843) 471-1933 www.AquaticAnalytics.com

## **Certificate of Analysis**

| Name:<br>Sample Site: | Wheeler, A |      |                  | Sample I<br>Sample T<br>Sample D<br>Receipt D | ype:<br>Date: | 023941<br>Surface Water<br>11/19/2023 14:0<br>11/20/2023 10:1 | 174.1              |                        |
|-----------------------|------------|------|------------------|-----------------------------------------------|---------------|---------------------------------------------------------------|--------------------|------------------------|
| Para                  | meter      | Qual | Sample<br>Result | Units                                         |               | Method                                                        | Reporting<br>Limit | Analysis<br>Start Date |
| E. coli (enumer       | ation)     |      | 488.4            | MPN/100 mls                                   | SM            | 4 9223B-2016                                                  | 1                  | 11/20/23<br>11:10      |



1180 Drop Off Drive Suite 101 Summerville, SC 29486 (843) 471-1933 www.AquaticAnalytics.com

### Certificate of Analysis

| Name:<br>Sample Site: | Wheeler, a 0.219 mi f | Arlene<br>rom Argyll |                  | Sample I<br>Sample T<br>Sample D<br>Receipt I | 'ype:<br>Date: | 023942<br>Surface Water<br>11/19/2023 14:0<br>11/20/2023 10: |                    |                        |
|-----------------------|-----------------------|----------------------|------------------|-----------------------------------------------|----------------|--------------------------------------------------------------|--------------------|------------------------|
| Para                  | meter                 | Qual                 | Sample<br>Result | Units                                         |                | Method                                                       | Reporting<br>Limit | Analysis<br>Start Date |
| E. coli (enumer       | ation)                |                      | 365.4            | MPN/100 mls                                   | SN             | 4 9223B-2016                                                 | 1                  | 11/20/23<br>11:10      |



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## **Certificate of Analysis**

| Name: Wheeler, Arlene |          |          | Sample II                                                                                                                           |             |               |                    |                        |
|-----------------------|----------|----------|-------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------|--------------------|------------------------|
| Sample Site:          | 377 Summ | erset- A | Sample Type:         Surface Water           Sample Date:         11/18/2023 14:00           Receipt Date:         11/20/2023 10:15 |             |               |                    |                        |
| Para                  | meter    | Qual     | Sample<br>Result                                                                                                                    | Units       | Method        | Reporting<br>Limit | Analysis<br>Start Date |
| E. coli (enumera      | ation)   |          | 137.4                                                                                                                               | MPN/100 mls | SM 9223B-2016 | 1                  | 11/20/23<br>11:10      |



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## **Certificate of Analysis**

| Name:            | Wheeler, J | Arlene    |                  | Sample<br>Sample  |    | 023944<br>Surface Water            |                    |                        |
|------------------|------------|-----------|------------------|-------------------|----|------------------------------------|--------------------|------------------------|
| Sample Site:     | 377 Sumn   | nerset- B |                  | Sample<br>Receipt |    | 11/18/2023 14:0<br>11/20/2023 10:1 |                    |                        |
| Para             | meter      | Qual      | Sample<br>Result | Units             |    | Method                             | Reporting<br>Limit | Analysis<br>Start Date |
| E. coli (enumera | ation)     |           | 290.9            | MPN/100 mls       | SN | M 9223B-2016                       | 1                  | 11/20/23<br>11:10      |

| AOU                                                                                        | ATIC             |                                     | CHAI                                 | N OF C                                  | UST     | ODY                                     | FOR     | M             | 0                 | c of C #                         | 8777                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------|------------------|-------------------------------------|--------------------------------------|-----------------------------------------|---------|-----------------------------------------|---------|---------------|-------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                            | NALYTICS         | 1                                   | 180 Drop Off D<br>Ph (843            | rive ∘ Suite<br>) 471-1933<br>www.aquat | Fax     | (843) 4                                 | 71-193  | SC 29486<br>4 | 1                 | . Page _                         | of                                                                                                                                                                                                                        |
| Project ID                                                                                 |                  |                                     | PO#:                                 |                                         | I       | 100.001                                 |         | ANALVO        | IS REQUESTED      |                                  | Prsrv and Matrix Code                                                                                                                                                                                                     |
|                                                                                            |                  |                                     |                                      |                                         | Pre     | servative                               |         | ANALTS        | IS REQUESTED      |                                  | X: None                                                                                                                                                                                                                   |
| Report To (name)                                                                           | rlene h          | heeler                              |                                      |                                         | -       | stic/Glass                              |         |               |                   |                                  | H: HCL                                                                                                                                                                                                                    |
| Report To (email) 🛛 🔼                                                                      | FICNE - 1        | where los                           | LC age                               | ot                                      | 1       |                                         |         |               |                   |                                  | N: HNO3<br>S: H2SO4                                                                                                                                                                                                       |
| Company/Address<br>Phone: 843 - 8<br>Invoice to (email):<br>Sampier's Signature<br>ATUME W | 119-6320<br>Jule | Fax:<br>Sampler's Printe<br>Av Jenn | d Name                               | edy.                                    | () or ( | (see codes at right)<br>R OF CONTAINERS | - M.    | walk          |                   |                                  | <ul> <li>B: NaOH</li> <li>B: NaOH</li> <li>Z: Zn Acetate</li> <li>T: NaThiosulfate</li> <li>C: loe only</li> <li>DW: drinking water</li> <li>WW: wastewater</li> <li>GW: groundwater</li> <li>S: surface water</li> </ul> |
| CLIENT SA                                                                                  | ~ ~              | Start                               | IPLE COLLECTI<br>End (C<br>TIME DATE | comp only)                              | GRAB (G | NUMBER OF                               | FE C    | 5             |                   |                                  | C: other<br>(AqA Use ONLY)                                                                                                                                                                                                |
| 6.154 mi f                                                                                 | r Hraylly        | 118/28 11                           | 400                                  |                                         | GJ      | 1                                       | X       |               |                   |                                  | 023941                                                                                                                                                                                                                    |
| 0.219 mi                                                                                   | Fr Argyll (      | 11 1                                | 400                                  |                                         | 61      | 112                                     | V       |               |                   |                                  | 023942                                                                                                                                                                                                                    |
| 377 Sur                                                                                    | n merser A       | 0 12 14                             | 100                                  |                                         | - 1     | 0                                       |         | +++           |                   | +++-                             | 000140                                                                                                                                                                                                                    |
|                                                                                            | enset (B)        |                                     |                                      |                                         | 6.      |                                         | X       | + $+$ $+$ $+$ |                   |                                  | 023942                                                                                                                                                                                                                    |
|                                                                                            | -3er(b)          | ·                                   | 100                                  |                                         |         | 2                                       | ×       |               |                   |                                  | 023944                                                                                                                                                                                                                    |
|                                                                                            |                  |                                     |                                      |                                         |         |                                         |         |               |                   |                                  |                                                                                                                                                                                                                           |
|                                                                                            |                  |                                     |                                      |                                         |         |                                         |         |               |                   |                                  |                                                                                                                                                                                                                           |
| pecial Instructions/Comme<br>I 年 2 色 11<br>3 + 4 色 ハ                                       | (19              | * CL                                | ient not<br>lere par                 | ofer h                                  | tha     | +                                       | ne.     | R             | OUND REQUIREMENTS | # Conte<br>All con<br>Tests with | ORMATION (Aga USE ONI<br>infore Correct? // N<br>lin hold times? // N<br>ample pH OK? // N / N/<br>On toe? // N / N/                                                                                                      |
| Retinquished By<br>gnature                                                                 | Signature        | ved By                              | Relinquished By<br>Signature         |                                         |         | Signatur                                | Receive | ed By         | Relinquished E    |                                  | Received By                                                                                                                                                                                                               |
| nted Name                                                                                  | Printed Name     |                                     | Printed Name                         |                                         |         | Printed N                               | lame    |               | Printed Name      | Tille (                          | sar                                                                                                                                                                                                                       |
| m                                                                                          | Firm             |                                     | Firm                                 |                                         |         | Firm                                    |         |               | Printed Name Wh   | C PY Prets                       | an miles                                                                                                                                                                                                                  |
| ite/Time                                                                                   | Dato/Time        |                                     | Date/Time                            |                                         |         | Date/Tim                                | e       |               | Date/Time         |                                  | ASA                                                                                                                                                                                                                       |
| ater rime                                                                                  | Dato/Time        |                                     | Date/Time                            |                                         |         | Date/Tim                                | 0       |               | Date/Time         | D 15 Dater                       |                                                                                                                                                                                                                           |

Ms. Wheeler collected the samples but did not transport them to the laboratory within the mandatory hold times. Technically the samples were invalid. Table 2 shows the summary of the results.

| November 19, 2024    |                        |  |  |  |  |
|----------------------|------------------------|--|--|--|--|
| Location             | Measurement MPN/100 ml |  |  |  |  |
| 0.154 Mi from Argyll | 488.4                  |  |  |  |  |
| 0.219 Mi from Argyll | 365.4                  |  |  |  |  |
| 377 Summerset A      | 137.4                  |  |  |  |  |
| 377 Summerset B      | 290.9                  |  |  |  |  |

In review of the E. Coli Measurement, at locations 377 Summerset A and B will actually meet recreational water standards for human contact.

# Water & Sewer Rumph's Hill Creek Testing

Water & Sewer conducted independent testing of Rumph's Hill Creek on May 8, 2024, and May 10, 2024. Testing was conducted at six test sites. All testing was conducted in occurrence with regulations.

| Sample Site Number | Location                               |
|--------------------|----------------------------------------|
| 1                  | Pump Station 5 at Highway 78           |
| 2                  | Creek near 147 Renau Blvd              |
| 3                  | Creek near Manhole 4-52                |
| 4                  | Creek behind Tennis Courts Pine Forest |
| 5                  | Creek near Manhole 4-14                |
| 6                  | Creek near Manhole 4-1A                |

Water & Sewer sampled the Rumph's Hill creek day before a rain event which occurred on the May 8, 2024, and a day after a rain event. Rumph's Hill Creek is not designated as recreational waters. The E. Coli limit is 346 MPN/100 ml for recreational waters. The E. Coli levels are affected by rain events as evidenced by the levels observed on May 10, 2024. It is significant that the collection system did not experience any SSOs during the rain event. The source of the increased E. Coli is from the runoff from properties along the Creek. For example, residences at 108 and 112 Columns Road have experienced septic tank failures. These failures were identified by Public Works as having impacts on stormwater runoff discharges from the residences. Water & Sewer worked with the developer and residents to allow discharge into our sanitary sewer system.

| Sample Location | 5/8/24 Sample Date | 5/10/24 Sample Date |
|-----------------|--------------------|---------------------|
| 1               | 145                | >2420               |
| 2               | 435                | >2420               |
| 3               | 1046               | >2420               |
| 4               | 365                | >2420               |
| 5               | 411                | >2420               |
| 6               | 238                | >2420               |

Water and Sewer resampled the Creek on May 13, 2024, for the same sample sites. Below are the findings :

| Sample Location | 5/13/24 Sample Date |
|-----------------|---------------------|
| 1               | 318                 |
| 2               | 591                 |
| 3               | 2382                |
| 4               | 336                 |
| 5               | 2310                |
| 6               | 402                 |

Water and Sewer also sampled four additional locations on May 13, 2024. Below are the findings:

| Sample Location              | 5/13/24 Sample Date |
|------------------------------|---------------------|
| Doral Blue Pond overflow     | 2481                |
| Butternutt Creek at Overpass | 422                 |
| Ditch near PS 33             | 1439                |
| Creek behind PS 59           | 5794                |

During the sampling activities, W&S encountered evidence of occupation of the creek by people. The following two pictures show the evidence. Notice the debris and the tent in the background of the first picture. The human DNA that Ms. Wheeler has reported has several potential sources:

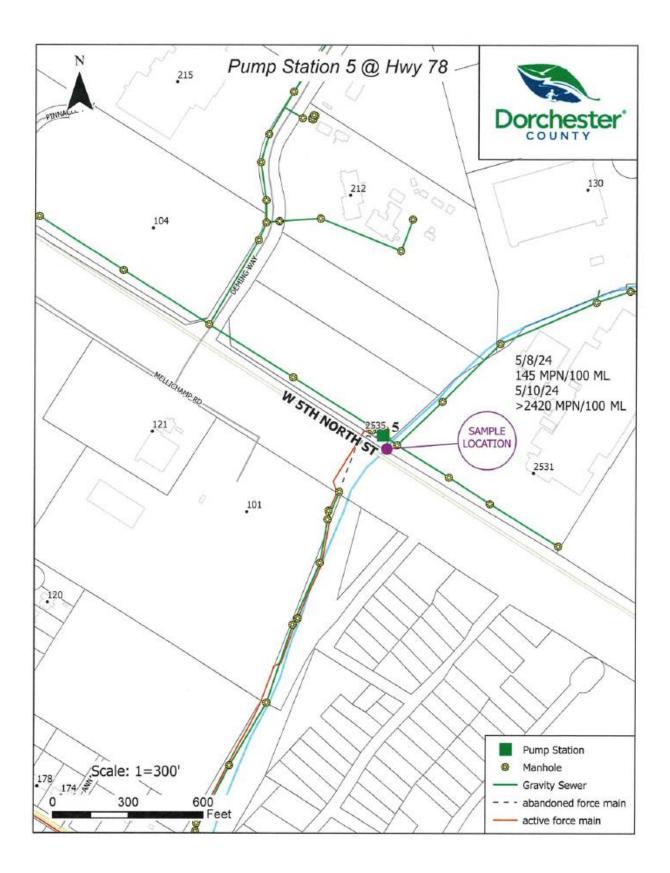
- People living along the creek
- Failing Septic Systems as in the case of 108 and 112 Columns Dr.
- Overflowing Retention Ponds.

DHEC conducted a sanitary survey of the collection system near Rumph's Hill Creek and determined that there are no issues and rated the system satisfactory.





Water and Sewer Testing Results





Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

Report Date: 05/09/24

Received: 05/08/24 12:15 Sample Id: 0241753 Sampled: 05/08/24 10:13 Sample Number(s): 289723 Collected By: SCD Received By: DWH Project Name: (None) Sample Matrix: SW 1 of 6 Location: Pump Station 5 @ 78 Crossing METHOD RESULT UNITS DATE/TIME ANALYST ANALYSIS Sample Type: Grab MPN/100 ml 05/08/24 15:45 MBL EColi (MPN) SM 9223B (2016) 145



#### REPORT OF ANALYSIS

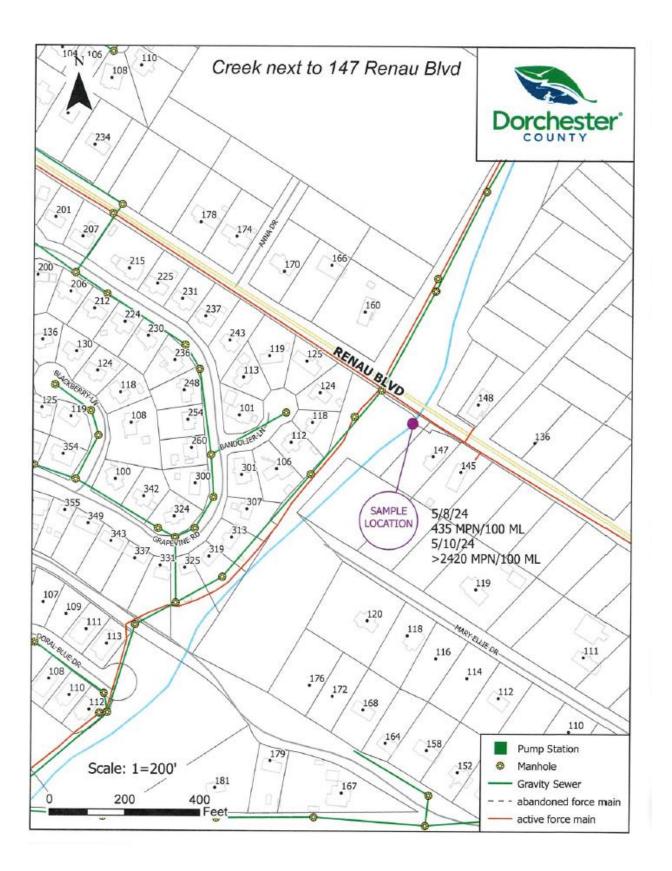
Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

| Sampled: 05/10/24 08:30<br>Collected By: SCD<br>Sample Matrix: SW | Received: 05/10/24 11:50<br>Received By: DWH | Sample Id: 0241798<br>Sample Number(s): 289853<br>Project Name: (None) |            |                |            |
|-------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------|------------|----------------|------------|
| 1 of 10                                                           |                                              | Location: Pump Station 5 @ 78 Cro                                      |            |                | 8 Crossing |
| ANALYSIS                                                          | METHOD                                       | RESULT                                                                 | UNITS      | DATE/TIME      | ANALYS     |
| Sample Type: Grab                                                 |                                              |                                                                        |            |                |            |
| EColi (MPN)                                                       | SM 9223B (2016)                              | > 2420                                                                 | MPN/100 ml | 05/10/24 14:00 | MBL        |



Dorchester County Water and Sewer 235 Deming Way Summerville , SC 29483

| Sampled: 05/13/24 11:02<br>Collected By: SCD<br>Sample Matrix: SFW<br>1 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | Sample Id: 0241818<br>Sample Number(s): 289906<br>Project Name: (None)<br>Location: Pump Station 5 @ 78 Crossing |
|-------------------------------------------------------------------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| ANALYSIS                                                                      | METHOD                                       | RESULT UNITS DATE/TIME ANALYST                                                                                   |
| Sample Type: Grab                                                             |                                              |                                                                                                                  |
| EColi (MPN)                                                                   | SM 9223B (2016)                              | 318 MPN/100 ml 05/13/24 15:00 MBL                                                                                |





Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

Report Date: 05/09/24

| Sampled: 05/08/24 10:35<br>Collected By: SCD<br>Sample Matrix: SW<br>2 of 6 | Received By: DWH S |                           | Sample Id: 0241753<br>Sample Number(s): 289724<br>Project Name: (None)<br>Location: Creek Next to 147 Renav |                |       |
|-----------------------------------------------------------------------------|--------------------|---------------------------|-------------------------------------------------------------------------------------------------------------|----------------|-------|
| ANALYSIS                                                                    | METHOD             | RESULT UNITS DATE/TIME AI |                                                                                                             | ANALYST        |       |
| Sample Type: Grab                                                           |                    |                           |                                                                                                             |                |       |
| EColi (MPN)                                                                 | SM 9223B (2016)    | 435                       | MPN/100 ml                                                                                                  | 05/08/24 15:45 | 6 MBL |



#### REPORT OF ANALYSIS

Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

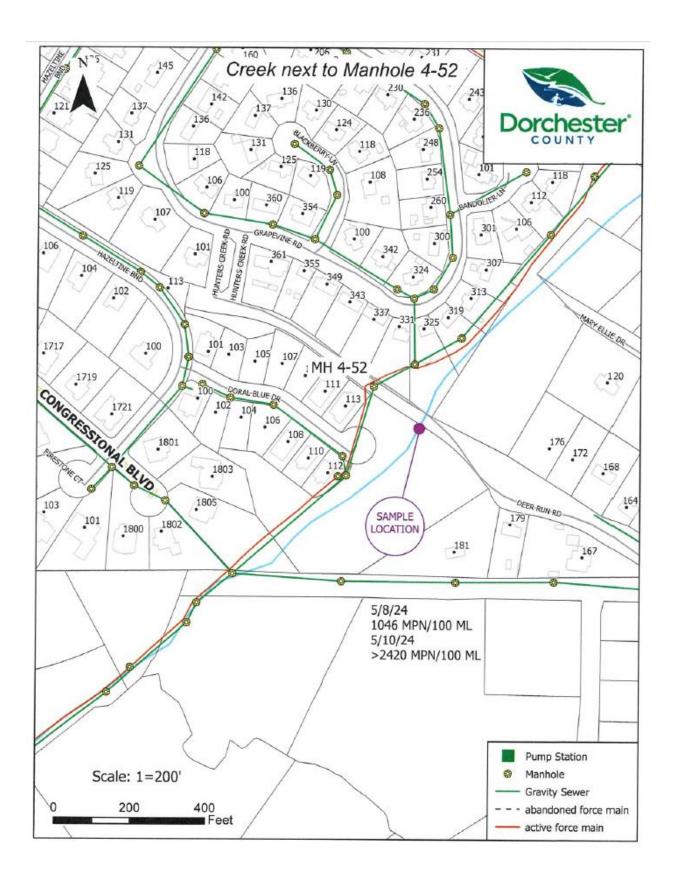
Report Date: 05/13/24

Sampled: 05/10/24 08:57 Received: 05/10/24 11:50 Sample Id: 0241798 Collected By: SCD Received By: DWH Sample Number(s): 289854 Sample Matrix: SW Project Name: (None) 2 of 10 Location: Creek Next to 147 Renav ANALYSIS METHOD RESULT UNITS DATE/TIME ANALYST Sample Type: Grab EColi (MPN) SM 9223B (2016) MPN/100 ml 05/10/24 14:00 MBL > 2420



Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

| Sampled: 05/13/24 11:12<br>Collected By: SCD<br>Sample Matrix: SFW<br>2 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | Sample Id: 0241818<br>Sample Number(s): 289907<br>Project Name: (None)<br>Location: Creek Next to 147 Renav |
|-------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| ANALYSIS                                                                      | METHOD                                       | RESULT UNITS DATE/TIME ANALYST                                                                              |
| Cample Tune: Orah                                                             |                                              |                                                                                                             |
| Sample Type: Grab                                                             |                                              |                                                                                                             |





Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

Report Date: 05/09/24

| Sampled: 05/08/24 10:54<br>Collected By: SCD<br>Sample Matrix: SW<br>3 of 6 | Received: 05/08/24 12:15<br>Received By: DWH | DWH S  |            | Sample Id: 0241753<br>Sample Number(s): 289725<br>Project Name: (None)<br>Location: Manhole 4-52 |         |  |
|-----------------------------------------------------------------------------|----------------------------------------------|--------|------------|--------------------------------------------------------------------------------------------------|---------|--|
| ANALYSIS                                                                    | METHOD                                       | RESULT | UNITS      | DATE/TIME                                                                                        | ANALYST |  |
| Sample Type: Grab                                                           |                                              |        |            |                                                                                                  |         |  |
| EColi (MPN)                                                                 | SM 9223B (2016)                              | 1046   | MPN/100 ml | 05/08/24 15:45                                                                                   | MBL     |  |



#### REPORT OF ANALYSIS

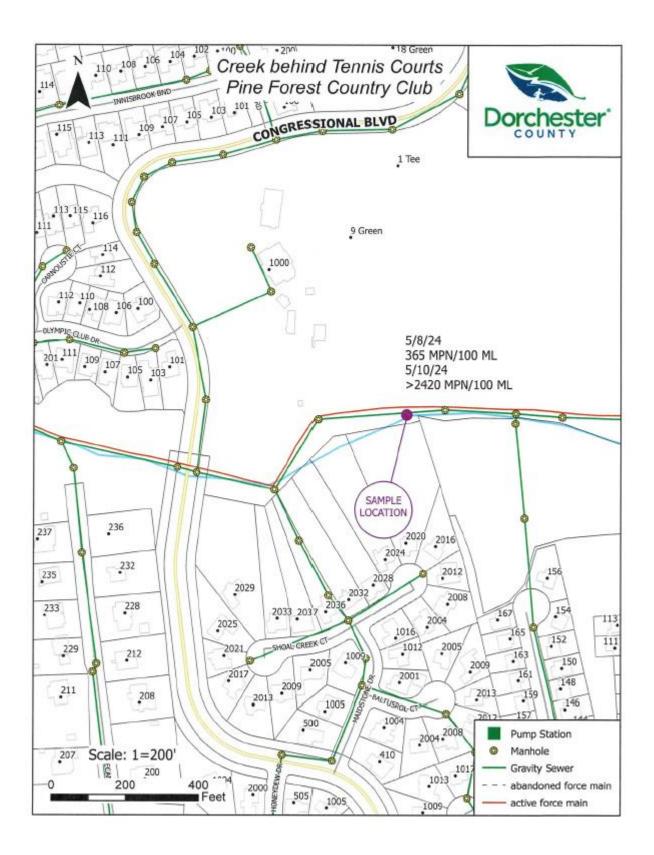
Dorchester County Water and Sewer 235 Deming Way Summerville , SC 29483

| Sampled: 05/10/24 09:32<br>Collected By: SCD<br>Sample Matrix: SW<br>4 of 10 | Received: 05/10/24 11:50<br>Received By: DWH | Sample Id: 0241798<br>Sample Number(s): 289856<br>Project Name: (None)<br>Location: Manhole 4-52 |            |                |         |
|------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------|------------|----------------|---------|
| ANALYSIS                                                                     | METHOD                                       | RESULT                                                                                           | UNITS      | DATE/TIME      | ANALYST |
| Sample Type: Grab                                                            |                                              |                                                                                                  |            |                |         |
| EColi (MPN)                                                                  | SM 9223B (2016)                              | > 2420                                                                                           | MPN/100 ml | 05/10/24 14:00 | MBL     |



Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

| Sampled: 05/13/24 11:42<br>Collected By: SCD<br>Sample Matrix: SFW<br>4 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | S      | ample Id: 024<br>ample Numbo<br>Project Name:<br>ocation: Cree | er(s): 289909  | le 4-52 |
|-------------------------------------------------------------------------------|----------------------------------------------|--------|----------------------------------------------------------------|----------------|---------|
| ANALYSIS                                                                      | METHOD                                       | RESULT | UNITS                                                          | DATE/TIME      | ANALYST |
| Sample Type: Grab                                                             |                                              |        |                                                                |                |         |
| EColi (MPN)                                                                   | SM 9223B (2016)                              | 2382   | MPN/100 ml                                                     | 05/13/24 15:00 | MBL     |





Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

Report Date: 05/13/24

| Sampled: 05/10/24 10:00<br>Collected By: SCD<br>Sample Matrix: SW<br>5 of 10 | Received: 05/10/24 1 1:50<br>Received By: DWH | 9 Sample Id: 0241798<br>Sample Number(s): 289857<br>Project Name: (None)<br>Location: Creek behind Tennis |            |                | Court @ Pine |
|------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------|----------------|--------------|
| ANALYSIS                                                                     | METHOD                                        | RESULT                                                                                                    | UNITS      | DATE/TIME      | ANALYST      |
| Sample Type: Grab                                                            |                                               |                                                                                                           |            |                |              |
| EColi (MPN)                                                                  | SM 9223B (2016)                               | > 2420                                                                                                    | MPN/100 ml | 05/10/24 14:00 | MBL          |



#### REPORT OF ANALYSIS

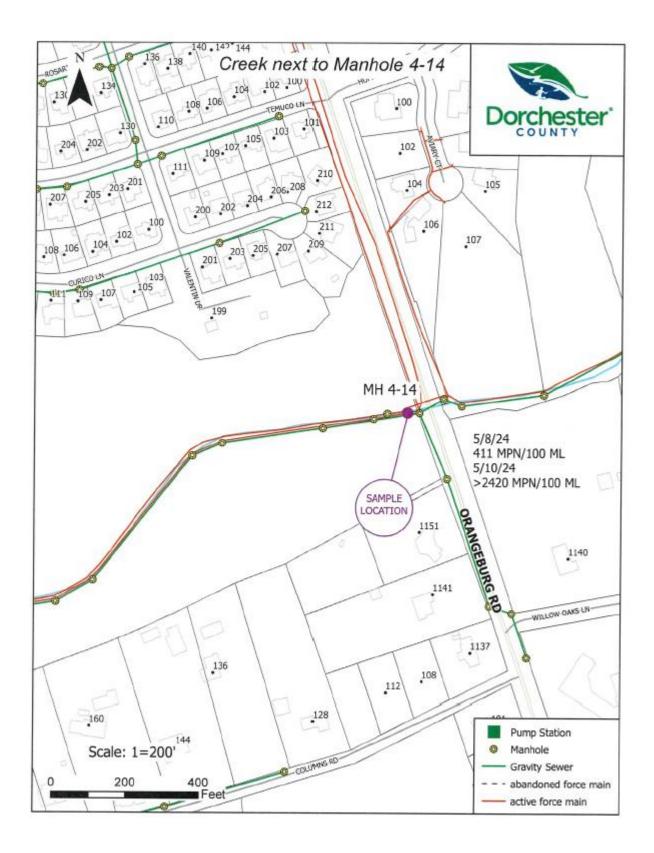
Dorchester County Water and Sewer 235 Deming Way Summerville , SC 29483

| Sampled: 05/10/24 10:00<br>Collected By: SCD<br>Sample Matrix: SW<br>5 of 10 | Received: 05/10/24 11:50<br>Received By: DWH | Sample Id: 0241798<br>Sample Number(s): 289857<br>Project Name: (None)<br>Location: Creek behind Tennis Court @ |            |                | Court @ Pine |
|------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------|----------------|--------------|
| ANALYSIS                                                                     | METHOD                                       | RESULT                                                                                                          | UNITS      | DATE/TIME      | ANALYST      |
| Sample Type: Grab                                                            |                                              |                                                                                                                 |            |                |              |
| EColi (MPN)                                                                  | SM 9223B (2016)                              | > 2420                                                                                                          | MPN/100 ml | 05/10/24 14:00 | MBL          |



Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

| Sampled: 05/13/24 12:13<br>Collected By: SCD<br>Sample Matrix: SFW<br>5 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | Sample Id: 0241818<br>Sample Number(s): 289910<br>Project Name: (None)<br>Location: Creek behind Tennis Court @ Pine |           | Sample Number(s): 289910<br>Project Name: (None) |         |
|-------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------|---------|
| ANALYSIS                                                                      | METHOD                                       | RESULT                                                                                                               | UNITS     | DATE/TIME                                        | ANALYST |
| Sample Type: Grab                                                             |                                              |                                                                                                                      |           |                                                  |         |
| EColi (MPN)                                                                   | SM 9223B (2016)                              | 336                                                                                                                  | MPN/100 m | 05/13/24 15:00                                   | MBL     |





Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

Report Date: 05/09/24

Sampled: 05/08/24 11:32 Received: 05/08/24 12:15 Sample Id: 0241753 Sample Number(s): 289727 Project Name: (None) Collected By: SCD Received By: DWH Sample Matrix: SW 5 of 6 Location: Creek Next to manhole 4-14 ANALYSIS METHOD RESULT UNITS DATE/TIME ANALYST Sample Type: Grab EColi (MPN) SM 9223B (2016) 411 MPN/100 ml 05/08/24 15:45 MBL



#### REPORT OF ANALYSIS

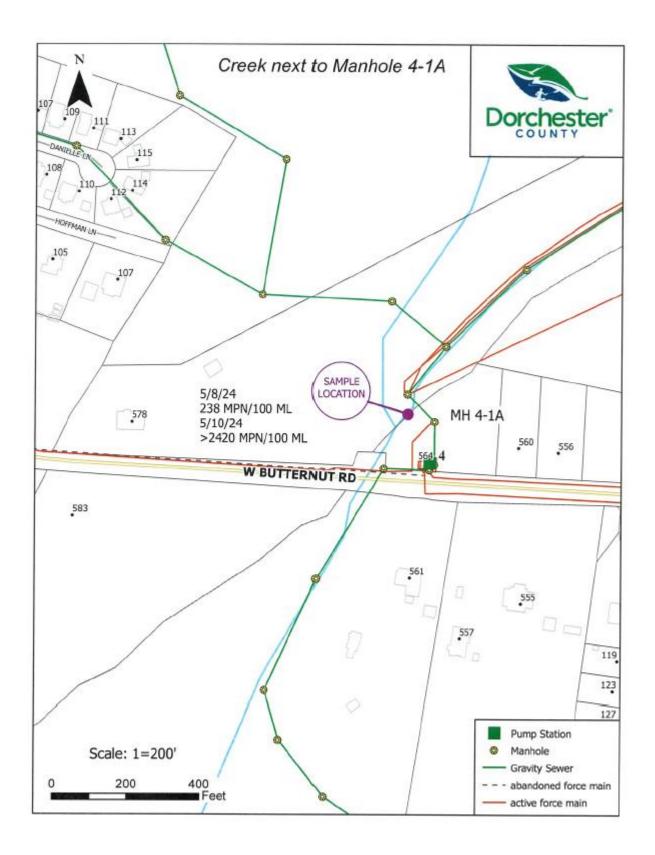
Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

| Sampled: 05/10/24 10:19<br>Collected By: SCD<br>Sample Matrix: SW<br>5 of 10 | Received: 05/10/24 11:50<br>Received By: DWH | Sample Id: 0241798<br>Sample Number(s): 289858<br>Project Name: (None)<br>Location: Creek Next to manhole 4-14 |            |                | ole 4-14 |  |
|------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------|----------------|----------|--|
| ANALYSIS                                                                     | METHOD                                       | RESULT                                                                                                         | UNITS      | DATE/TIME      | ANALYST  |  |
| Sample Type: Grab                                                            |                                              |                                                                                                                |            |                |          |  |
| EColi (MPN)                                                                  | SM 9223B (2016)                              | > 2420                                                                                                         | MPN/100 ml | 05/10/24 14:00 | MBL      |  |



Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

| Sampled: 05/13/24 13:33<br>Collected By: SCD<br>Sample Matrix: SFW<br>10 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | Sample Id: 0241818<br>Sample Number(s): 289915<br>Project Name: (None)<br>Location: Creek Next to manhole 4-14 |  |  |
|--------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|
| ANALYSIS                                                                       | METHOD                                       | RESULT UNITS DATE/TIME ANALYST                                                                                 |  |  |
| Sample Type: Grab                                                              |                                              |                                                                                                                |  |  |
| EColi (MPN)                                                                    | SM 9223B (2016)                              | 2310 MPN/100 ml 05/13/24 15:00 MBL                                                                             |  |  |





Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

Report Date: 05/09/24

Received: 05/08/24 12:15 Sample Id: 0241753 Sampled: 05/08/24 11:42 Collected By: SCD Received By: DWH Sample Number(s): 289728 Project Name: (None) Sample Matrix: SW 6 of 6 Location: Creek Crossing @ Manhole 4-1A RESULT UNITS DATE/TIME ANALYST ANALYSIS METHOD Sample Type: Grab SM 9223B (2016) 238 MPN/100 ml 05/08/24 15:45 MBL

EColi (MPN)



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#### REPORT OF ANALYSIS

Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

| Sampled: 05/10/24 10:32<br>Collected By: SCD<br>Sample Matrix: SW<br>7 of 10 | Received: 05/10/24 11:50<br>Received By: DWH | Sample Id: 0241798<br>Sample Number(s): 289859<br>Project Name: (None)<br>Location: Creek Crossing @ Manhole 4-1A |            |                |         |
|------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------|----------------|---------|
| ANALYSIS                                                                     | METHOD                                       | RESULT                                                                                                            | UNITS      | DATE/TIME      | ANALYST |
| Sample Type: Grab                                                            |                                              |                                                                                                                   |            |                |         |
| EColi (MPN)                                                                  | SM 9223B (2016)                              | > 2420                                                                                                            | MPN/100 ml | 05/10/24 14:00 | MBL     |



Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

| Sampled: 05/13/24 12:40<br>Collected By: SCD<br>Sample Matrix: SFW<br>6 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | Sample Id: 0241818<br>Sample Number(s): 289911<br>Project Name: (None)<br>Location: Creek Crossing @ Manhole 4-1A |  |  |
|-------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--|--|
| ANALYSIS                                                                      | METHOD                                       | RESULT UNITS DATE/TIME ANALYST                                                                                    |  |  |
| Sample Type: Grab                                                             |                                              |                                                                                                                   |  |  |
| EColi (MPN)                                                                   | SM 9223B (2016)                              | 402 MPN/100 ml 05/13/24 15:00 MBL                                                                                 |  |  |

Additional Testing Sites May 13, 2024



Dorchester County Water and Sewer 235 Deming Way Summerville , SC 29483

Report Date: 05/14/24

| Sampled: 05/13/24 11:28<br>Collected By: SCD<br>Sample Matrix: SFW<br>3 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | Sample Id: 0241818<br>Sample Number(s): 289908<br>Project Name: (None)<br>Location: Doral Blue Pond Overflow into RH |            |                | erflow into RH |
|-------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------|----------------|----------------|
| ANALYSIS                                                                      | METHOD                                       | RESULT                                                                                                               | UNITS      | DATE/TIME      | ANALYST        |
| Sample Type: Grab                                                             |                                              |                                                                                                                      |            |                |                |
| EColi (MPN)                                                                   | SM 9223B (2016)                              | 2481                                                                                                                 | MPN/100 ml | 05/13/24 15:00 | MBL            |



#### REPORT OF ANALYSIS

Dorchester County Water and Sewer 235 Deming Way Summerville , SC 29483

| Sampled: 05/13/24 12:48<br>Collected By: SCD<br>Sample Matrix: SFW<br>7 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | Sample Id: 0241818<br>Sample Number(s): 289912<br>Project Name: (None)<br>Location: Butternut Creek @ Overpass |  |  |
|-------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------|--|--|
| ANALYSIS                                                                      | METHOD                                       | RESULT UNITS DATE/TIME ANALYST                                                                                 |  |  |
|                                                                               |                                              |                                                                                                                |  |  |
| Sample Type: Grab                                                             |                                              |                                                                                                                |  |  |



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#### REPORT OF ANALYSIS

Dorchester County Water and Sewer 235 Deming Way Summerville, SC 29483

Report Date: 05/14/24

| Sampled: 05/13/24 13:01<br>Collected By: SCD<br>Sample Matrix: SFW<br>8 of 10 | Received: 05/13/24 14:15<br>Received By: DWH | :      | Sample Id: 0241818<br>Sample Number(s): 289913<br>Project Name: (None)<br>Location: Ditch next to Pump station 3 |                |         |
|-------------------------------------------------------------------------------|----------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------|----------------|---------|
| ANALYSIS                                                                      | METHOD                                       | RESULT | UNITS                                                                                                            | DATE/TIME      | ANALYST |
| Sample Type: Grab                                                             |                                              |        |                                                                                                                  |                |         |
| EColi (MPN)                                                                   | SM 9223B (2016)                              | 1439   | MPN/100 ml                                                                                                       | 05/13/24 15:00 | MBL     |



#### REPORT OF ANALYSIS

| Dorchester County Water and Sewer<br>235 Deming Way<br>Summerville , SC 29483  | Report Date: 05/14/                          | 24    |                                                                 |                 |          |
|--------------------------------------------------------------------------------|----------------------------------------------|-------|-----------------------------------------------------------------|-----------------|----------|
| Sampled: 05/13/24 13:33<br>Collected By: SCD<br>Sample Matrix: SFW<br>10 of 10 | Received: 05/13/24 14:15<br>Received By: DWH |       | Sample Id: 02<br>Sample Numb<br>Project Name:<br>Location: Cree | er(s): 289915   | ole 4-14 |
| ANALYSIS                                                                       | METHOD                                       | RESUL | T UNITS                                                         | DATE/TIME       | ANALYST  |
| Sample Type: Grab                                                              |                                              |       |                                                                 |                 |          |
| EColi (MPN)                                                                    | SM 9223B (2016)                              | 2310  | MPN/100 m                                                       | I 05/13/24 15:0 | 0 MBL    |