



# Environmental Chemists, Inc.

6602 Windmill Way, Wilmington, NC 28405 • 910.392.0223 Lab • 910.392.4424 Fax  
710 Bowsertown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax  
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

ANALYTICAL & CONSULTING CHEMISTS

info@environmentalchemists.com

**City of Boiling Spring Lakes**  
9 East Boiling Spring Road  
Boiling Spring Lake NC 28461  
Attention:

**Date of Report:** Aug 07, 2025  
**Customer PO #:**  
**Customer ID:** 08100287  
**Report #:** 2025-16619  
**Project ID:** Lake Sample

| Lab ID   | Sample ID:        | Collect Date/Time |          | Matrix | Sampled by   |
|----------|-------------------|-------------------|----------|--------|--------------|
| 25-43759 | Site: Spring Lake | 8/4/2025          | 12:48 PM | Water  | Mike Miracle |

| Test           | Method            | Results             | Date Analyzed |
|----------------|-------------------|---------------------|---------------|
| Enterococci    | Enterolert IDEXX  | 8 MPN/100ml         | 08/04/2025    |
| Fecal Coliform | SM 9222 D-2015 MF | 2360 Colonies/100mL | 08/04/2025    |
| E. Coli        | SM 9223B-MW       | 78 MPN/100ml        | 08/04/2025    |
| Total Coliform | SM 9223B-MW       | >2420 MPN/100ml     | 08/04/2025    |

| Lab ID   | Sample ID:      | Collect Date/Time |          | Matrix | Sampled by   |
|----------|-----------------|-------------------|----------|--------|--------------|
| 25-43760 | Site: Tate Lake | 8/4/2025          | 12:36 PM | Water  | Mike Miracle |

| Test           | Method            | Results           | Date Analyzed |
|----------------|-------------------|-------------------|---------------|
| Enterococci    | Enterolert IDEXX  | 1 MPN/100ml       | 08/04/2025    |
| Fecal Coliform | SM 9222 D-2015 MF | 28 Colonies/100mL | 08/04/2025    |
| E. Coli        | SM 9223B-MW       | 22 MPN/100ml      | 08/04/2025    |
| Total Coliform | SM 9223B-MW       | >2420 MPN/100ml   | 08/04/2025    |

| Lab ID   | Sample ID:          | Collect Date/Time |          | Matrix | Sampled by   |
|----------|---------------------|-------------------|----------|--------|--------------|
| 25-43761 | Site: Seminole Lake | 8/4/2025          | 12:24 PM | Water  | Mike Miracle |

| Test           | Method            | Results             | Date Analyzed |
|----------------|-------------------|---------------------|---------------|
| Enterococci    | Enterolert IDEXX  | 19 MPN/100ml        | 08/04/2025    |
| Fecal Coliform | SM 9222 D-2015 MF | 1460 Colonies/100mL | 08/04/2025    |
| E. Coli        | SM 9223B-MW       | 366 MPN/100ml       | 08/04/2025    |
| Total Coliform | SM 9223B-MW       | >2420 MPN/100ml     | 08/04/2025    |



# Environmental Chemists, Inc.

6602 Windmill Way, Wilmington, NC 28405 • 910.392.0223 Lab • 910.392.4424 Fax  
710 Bowserstown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax  
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

ANALYTICAL & CONSULTING CHEMISTS

info@environmentalchemists.com

**City of Boiling Spring Lakes**  
9 East Boiling Spring Road  
Boiling Spring Lake NC 28461  
Attention:

**Date of Report:** Aug 07, 2025  
**Customer PO #:**  
**Customer ID:** 08100287  
**Report #:** 2025-16619  
**Project ID:** Lake Sample

| Lab ID         | Sample ID:        | Collect Date/Time |          | Matrix            | Sampled by    |
|----------------|-------------------|-------------------|----------|-------------------|---------------|
| 25-43762       | Site: Mirror Lake | 8/4/2025          | 12:28 PM | Water             | Mike Miracle  |
| Test           |                   | Method            |          | Results           | Date Analyzed |
| Enterococci    |                   | Enterolert IDEXX  |          | 1 MPN/100ml       | 08/04/2025    |
| Fecal Coliform |                   | SM 9222 D-2015 MF |          | 55 Colonies/100mL | 08/04/2025    |
| E. Coli        |                   | SM 9223B-MW       |          | 2 MPN/100ml       | 08/04/2025    |
| Total Coliform |                   | SM 9223B-MW       |          | >2420 MPN/100ml   | 08/04/2025    |

Comment:

Reviewed by:

*Handwritten signature: Heidi Olfert*

## Sample Receipt Checklist

Client: Boiling Springs Lakes Date: 8/4/25 Report Number: 2025 - 16619

|  |                             |   |  |   |                                |                                |
|--|-----------------------------|---|--|---|--------------------------------|--------------------------------|
| Receipt of sample:                         |                             | ECHEM Pickup <input checked="" type="checkbox"/>                          | Client Delivery <input type="checkbox"/>                     | UPS <input type="checkbox"/>                        | FedEx <input type="checkbox"/> | Other <input type="checkbox"/> |
| <input type="checkbox"/> YES               | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A                                   | 1. Were custody seals present on the cooler?                 |   |                                |                                |
| <input type="checkbox"/> YES               | <input type="checkbox"/> NO | <input checked="" type="checkbox"/> N/A                                   | 2. If custody seals were present, were they intact/unbroken? |   |                                |                                |
| Original temperature upon receipt          |                             | <u>4.5</u> °C   | Corrected temperature upon receipt                           |   | _____ °C                       |                                |
| How temperature taken:                     |                             | <input type="checkbox"/> Temperature Blank                                |  | <input checked="" type="checkbox"/> Against Bottles |                                |                                |
| IR Gun ID: Thomas Traceable S/N: 250289912 |                             | IR Gun Correction Factor °C: 0.0  |  |   |                                |                                |
| <input type="checkbox"/> YES               | <input type="checkbox"/> NO | 3. If temperature of cooler exceeded 6°C, was Project Mgr./QA notified?   |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 4. Were proper custody procedures (relinquished/received) followed?       |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 5. Were sample ID's listed on the COC?                                    |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 6. Were samples ID's listed on sample containers?                         |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 7. Were collection date and time listed on the COC?                       |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 8. Were tests to be performed listed on the COC?                          |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 9. Did samples arrive in proper containers for each test?                 |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 10. Did samples arrive in good condition for each test?                   |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 11. Was adequate sample volume available?                                 |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 12. Were samples received within proper holding time for requested tests? |  |   |                                |                                |
| <input checked="" type="checkbox"/> YES    | <input type="checkbox"/> NO | 13. Were acid preserved samples received at a pH of <2? *                 |  |   |                                |                                |
| <input type="checkbox"/> YES               | <input type="checkbox"/> NO | 14. Were cyanide samples received at a pH >12?                            |  |   |                                |                                |
| <input type="checkbox"/> YES               | <input type="checkbox"/> NO | 15. Were sulfide samples received at a pH >9?                             |  |   |                                |                                |
| <input type="checkbox"/> YES               | <input type="checkbox"/> NO | 16. Were NH3/TKN/Phenol received at a chlorine residual of <0.5 m/L? **   |  |   |                                |                                |
| <input type="checkbox"/> YES               | <input type="checkbox"/> NO | 17. Were Sulfide/Cyanide received at a chlorine residual of <0.5 m/L?     |  |   |                                |                                |
| <input type="checkbox"/> YES               | <input type="checkbox"/> NO | 18. Were orthophosphate samples filtered in the field within 15 minutes?  |  |   |                                |                                |

\* TOC/Volatiles are pH checked at time of analysis and recorded on the benchsheet.

\*\* Bacteria samples are checked for Chlorine at time of analysis and recorded on the benchsheet.

|  |   |
|--|---|
| <b>Sample Preservation:</b>  | (Must be completed for any sample(s) incorrectly preserved or with headspace) |
| Sample(s) _____  | were received incorrectly preserved and were adjusted accordingly             |
| by adding (circle one):  | H <sub>2</sub> SO <sub>4</sub> HNO <sub>3</sub> HCl    NaOH                   |
| Time of preservation: _____  | If more than one preservative is needed, notate in comments below             |
| Note: Notify customer service immediately for incorrectly preserved samples. Obtain a new sample or notify the state lab if directed to analyzed by the customer. Who was notified, date and time: _____ |   |
| Volatiles Sample(s) _____  | were received with headspace  |

COMMENTS:



NCDENR: DWA CERTIFICATION # 94 NCDHHS: DIS CERTIFICATION # 37729

6602 Windmill Way Wilmington, NC 28405  
OFFICE: 910-392-0223 FAX 910-392-4424  
info@environmentalchemists.com

## COLLECTION AND CHAIN OF CUSTODY

|                                      |               |                     |
|--------------------------------------|---------------|---------------------|
| Client: City of Boiling Spring Lakes | PROJECT NAME: | REPORT NO: 25-16619 |
| ADDRESS:                             | CONTACT NAME: | PO NO:              |
|                                      | REPORT TO:    | PHONE/FAX:          |
|                                      | COPY TO:      | email:              |

**SAMPLE TYPE: I = Influent, E = Effluent, W = Well, ST = Stream, SO = Soil, SL = Sludge, Other:**

| Sample Identification  | Collection       |      |      | Sample Type | Composite or Grab | Container (P or G) | Chlorine mg/L | pH of bottle | LAB ID NUMBER | PRESERVATION |     |       |           |      |      |          | ANALYSIS REQUESTED                    |       |
|--|------------------|------|------|-------------|-------------------|--------------------|---------------|--------------|---------------|--------------|-----|-------|-----------|------|------|----------|---------------------------------------|-------|
|  | Date             | Time | Temp |             |                   |                    |               |              |               | NONE         | HCL | H2SO4 | HNO3      | NAOH | THIO | FILTERED |                                       | OTHER |
|  |                  |      |      |             |                   |                    |               |              |               |              |     |       |           |      |      |          |                                       |       |
| Spring Lake  | 8-4-25           | 1248 |      |             | C                 | P                  |               |              | 4359          |              |     |       |           |      |      |          | E.Coli, Entero, Fecal, Total Coliform |       |
| Tate Lake  |                  |      |      |             | C                 | P                  |               |              | 40            |              |     |       |           |      |      |          | E.Coli, Entero, Fecal, Total Coliform |       |
|  |                  | 1236 |      |             | G                 | G                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
|  |                  |      |      |             | C                 | P                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
| Seminole Lake  |                  |      |      |             | G                 | G                  |               |              | 41            |              |     |       |           |      |      |          | E.Coli, Entero, Fecal, Total Coliform |       |
| Mirror Lake  |                  |      |      |             | C                 | P                  |               |              | 42            |              |     |       |           |      |      |          | E.Coli, Entero, Fecal, Total Coliform |       |
|  |                  | 1228 |      |             | G                 | G                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
|  |                  |      |      |             | C                 | P                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
|  |                  |      |      |             | G                 | G                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
|  |                  |      |      |             | C                 | P                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
|  |                  |      |      |             | G                 | G                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
|  |                  |      |      |             | C                 | P                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
|  |                  |      |      |             | G                 | G                  |               |              |               |              |     |       |           |      |      |          |                                       |       |
| NOTICE - DECHLORINATION: Samples for Ammonia, TKN, Cyanide, Phenol and Bacteria must be dechlorinated (0.5 ppm or less) in the field at the time of collection. See reverse for instructions |                  |      |      |             |                   |                    |               |              |               |              |     |       |           |      |      |          |                                       |       |
| Transfer   | Relinquished By: |      |      |             | Date/Time         |                    |               |              | Received By:  |              |     |       | Date/Time |      |      |          |                                       |       |
| 1.   |                  |      |      |             |                   |                    |               |              |               |              |     |       |           |      |      |          |                                       |       |
| 2.   |                  |      |      |             |                   |                    |               |              |               |              |     |       |           |      |      |          |                                       |       |

Temperature when Received °C: 4.5 Accepted: ☒ Rejected: ☐ Resample Requested: ☐  
Delivered By: MMH Received By: MMH Date: 5-12-05 Time: 1408  
Comments: \_\_\_\_\_  
TURNAROUND: \_\_\_\_\_