



2023/2024

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2023/2024

City of Tuscumbia
NPDES Permit # ALR040022
Annual Report

Contents

Introduction 4

MS4 Description..... 5

2023-2024 Evaluation General Discussion..... 5

I Public Education and Outreach..... 6

 BMP No. 1- Mail out flyers to homes and businesses during and social media 6

 Challenges: 6

 BMP Rationale:..... 6

 Activities:..... 6

 Home Page Focus Element Links: 7

 BMP No. 2: Run-Off Reduction/ Permeable Pavement 8

 Challenge:..... 8

 BMP Rationale:..... 8

 Activities:..... 8

 BMP No. 4 - Storm Drain Inlet Protection and Public Awareness 8

 Challenge:..... 8

 BMP Rationale:..... 8

 Activities:..... 8

2023/2024 Public Education and Outreach Evaluation: 9

Measure Specific Activities Planned for the next Reporting Period 9

II. Public Involvement and Participation 9

 Challenge:..... 9

 BMP Rationale:..... 9

 Activities:..... 9

 BMP No. 2: Stenciling at Stormwater Inlets..... 10

 Challenge:..... 10

 BMP Rationale:..... 10

 Activities:..... 10

 BMP No. 3 - Art Contest at Elementary Schools 10

 Challenge:..... 10

 BMP Rationale:..... 10

 Activities:..... 10

2023/2024 Public Education and Outreach Evaluation: 11

Measure Specific Activities Planned for the Next Reporting Period 11

III. Illicit Discharge Detection & Elimination 11

BMP No. 1: Enforcement Personnel to Re-certify QCI..... 11

 Challenge:..... 11

 BMP Rationale:..... 11

 Activities:..... 11

BMP No. 2: Site Inspections - Industrial, Commercial, Construction Sites 12

 Challenge:..... 12

 BMP Rationale:..... 12

 Activities:..... 12

BMP No. 3: Stormwater Runoff Monitoring & 303(d) Spring Creek Stream Sampling..... 12

2023/2024 Illicit Discharge Detection and Elimination Evaluation: 12

Measure Specific Activities Planned for the next Reporting Period 13

IV. Construction Site Stormwater Runoff Control..... 13

BMP No. 1: Construction Sites Permitted by City and ADEM 13

 Challenge:..... 13

 BMP Rationale:..... 13

 Activities:..... 13

BMP No. 2: Follow Up on Inspections If Required 14

 Challenge:..... 14

 BMP Rationale:..... 14

 Activities:..... 14

BMP No. 3: Construction Stormwater Runoff Sampling and Testing 14

 Challenge:..... 14

 BMP Rationale:..... 14

 Activities:..... 14

2023/2024 Construction Site Stormwater Runoff Control Evaluation: 14

Measure Specific Activities Planned for the Next Reporting Period 14

V. Post Construction Stormwater Management in New Development and Re-Development..... 15

BMP No. 2: Post Construction Maintenance Agreements..... 15

 Challenge:..... 15

BMP Rationale:..... 15

Activities:..... 15

2023/2024 Construction Site Stormwater Runoff Control Evaluation: 15

Measure Specific Activities Planned for the Next Reporting Period 15

VI. Pollution Prevention / Good Housekeeping for Municipal Operations..... 16

BMP No. 1: Personnel Training 16

Challenge:..... 16

BMP Rationale:..... 16

Activities:..... 16

BMP No. 2: Solid Waste Collection from Streets and Drains..... 16

Challenge:..... 16

BMP Rationale:..... 16

Activities:..... 16

2023/2024 Pollution Prevention / Good Housekeeping for Municipal Operations Evaluation: 17

Measure Specific Activities Planned for the Next Reporting Period 17

Appendix A – 2023/2024 Spring Creek Monitoring Laboratory Reports..... 18

Introduction

This Annual Report was developed under the guidelines provided in Title 40 Code of Federal Regulations (CFR), Part 122.26(b)(16) which authorizes discharges of stormwater from small MS4s incorporated by reference in the Alabama Administrative Code 335-6 as administered by the Alabama Department of Environmental Management (ADEM) and NPDES ALR040022 Phase II General Permit effective October 1, 2016.

The City of Tusculmbia (City) has completed this Annual Report in Compliance with Part V. C. Reporting of the NPDES Phase II Permit No. ALR040022. The purpose of this Annual Report is to describe the compliance efforts reflected in the City's Storm Water Management Protection Plan (SWMPP) and to better understand the need for additional compliance measures. It also allows the Stormwater Committee (SWC) to evaluate compliance, and to propose additional controls, activities, and documentation. The permit requires that the City of Tusculmbia submit an annual report to ADEM each year by May 31. The Annual Reports cover the year (April 1 - March 31) before the submittal date. This annual report covers the period from April 1, 2022, to March 31, 2023. Per the requirements of the permit, the Annual Report includes the following:

- The status of compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Possible (MEP), and the measurable goals for each of the minimum control measures.
- Results of information collected and analyzed, if any, during the reporting period,
- including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
- A summary of the stormwater activities we plan to undertake during the next reporting cycle (including an implementation schedule).
- Proposed changes to the SMWP, including changes to any BMPs or any identified measurable goals that apply to the program elements.
- Notice that we are relying on another government entity to satisfy some permit obligations (if applicable); and
- All monitoring results collected during the previous year per Part V, if applicable. The monitoring reports shall be submitted in a format acceptable to the Department.

These elements will be addressed within the Annual Report and in each section detailing the implementation of the six minimum measures:

- I. Public Education and Public Involvement
- II. Illicit Discharge Detection and Elimination
- III. Erosion and Sedimentation Controls
- IV. Post-Construction Storm Water Runoff Control
- V. Pollution Prevention and Good Housekeeping

MS4 Description

The City of Tuscumbia (City) is a mixed-used community consisting of urban, residential, and light industries located in Colbert County, Alabama, comprised of approximately 22.8 km². Tuscumbia is located northeast of the center of Colbert County at 34°43'51"N 87°42'10"W (34.730839, -87.702854). Tuscumbia is bordered to the north by the City of Sheffield and to the northeast by the City of Muscle Shoals. The Tennessee River is 1 mile (1.6 km) to the northwest. The main receiving stream is Spring Creek, which flows through the center of the City.

2023-2024 Evaluation General Discussion

The Tuscumbia MS4 Program continues to make significant strides over the past few years in working toward achieving improvements in its NPDES Phase II MS4 Permit Program. Still, the City has been somewhat impacted significantly by COVID implications for most of 2023 as various surges occurred periodically. As a result, in-person activities were gradually introduced over time. In addition, an ADEM Audit was performed by Cammie Ashmore and Melanie Ratcliffe in July of 2020. During the audit process, the City was able to understand better the focus requirements of the MS4 permit going forward.

One of the most significant gains of the Tuscumbia MS4 Program has been the increased focus on stormwater inspections, dry weather inspections, and citywide cleanups. These efforts have fostered a sense of shared responsibility and accomplishment between the City and the public, as they work together as stakeholders in environmental protection.

After COVID, the in-person activities were limited during 2021, but were increased in 2022-2023. As a result, there were limited community impacts from those activities. However, in-person activities are scheduled to resume at full scale in 2022. The public education and involvement result is the community becoming more involved every year to limit potential stormwater impacts to receiving streams.

In addition, City staff and the community are becoming more involved as stakeholders. They are encouraged by the volume of curbside solid waste that is being collected to be properly disposed of in the local landfill and for recycling. The ongoing collection of solid waste and debris (approximately 2500 tons) and “Chunk the Junk” performed by the City Street Department positively impacts the water quality and esthetics of Spring Creek and its tributaries.

Also, the City is in the process of redeveloping Spring Creek Park with increased green space to buffer Spring Creek and educate the public on the importance of protecting stream zones. The City will continue to work toward improving the public participation elements of the Program.

In 2020 and 2022, the City updated the SWMPP, which provided an evaluation and review of the impacts of BMPs on the public, the City staff, and water quality.

The program will focus on public participation activities, public outreach, construction stormwater compliance, outfall monitoring, stream sampling, and record-keeping in the next reporting period.

City of Tuscumbia
Alabama NPDES Phase II Annual Report Permit # ALR040022
May 21, 2024

This report documents the activities related to each of the six (6) Minimum Control Measures, including the BMP and rationale statement, as required by the City of Tuscumbia's NPDES Stormwater (MS4) permit.

The Appendix includes the Spring Creek Sampling Data information.

I Public Education and Outreach

BMP No. 1- Mail out flyers to homes and businesses during and social media

Challenges: The primary source of pollution addressed by public education and outreach is trash, litter, soil disturbances, chemicals, and individual oil changes.

BMP Rationale: The problems addressed by this BMP are most common to residences and businesses in this area. Correcting these problems will go a long way toward cleaning up the waters in this area. The published information reaches a large segment of the population by placing billboards and signs at strategic locations and coordinating with "Keep the Shoals Beautiful" and the Chamber of Commerce and Civic Organizations.

Activities:

Ongoing: Ordinances have been adopted which encourage the limited use of fertilizer, pesticides, and herbicides within the City. The City continues to get involved and support activities and events that educate the public on how litter and pollution control can help the environment. Notices to protect sewer and storm drains are placed in at least one (1) utility bill (March 22). Social media is used to spread the word about recycling and stream protection.

2023-2024 Activities:

Social Media Postings

City of Tuscumbia Facebook Page

<https://www.facebook.com/TuscumbiaAL>

- Community Service Spotlight – 5/1/23
- Community Clean-up Event – 7/29/23
- Community Clean-up -7/29/23 (Thank You)

- Spring Park Clean-up – 9/30/23
- Landfill Reopening – 10/19/23

Tuscumbia Streets and Sanitation Facebook Page

<https://www.facebook.com/TuscumbiaSanitation>

- Yard Waste Post
- Reminder to bag yard clippings and roadside debris to prevent entry into streams.
- Reminder regarding Chuck the Junk Program cleanup day.
- Reminder to not flush grease, paper towels, or wipes down the sewer which will cause significant blockage in the system.

Keep the Shoals Beautiful Facebook Page

<https://www.facebook.com/KeepTheShoalsBeautiful>

- Jazz Up with Trash (7/26/24)

Webpage Update: Continuous updates are ongoing. (Total views 3000)

https://cityoftuscumbia.org/?page_id=89

<https://cityoftuscumbia.org/departments/public-works/>

Home Page Focus Element Links:

https://cityoftuscumbia.org/?page_id=89

- 2022/2023 MS4 Annual Reporting
- Removal of Trash and Debris Ordinance
- Stormwater FAQ
- 2022 Updated SWMP
- Sewer Do's & Dont's
- Buildings & Permit Page Focus Elements Links:
http://cityoftuscumbia.org/?page_id=2151
<https://cityoftuscumbia.org/departments/public-works/>

“Notice: “PLEASE DO NOT FLUSH OR DRAIN GREASE, PAPER TOWELS OR WIPES DOWN YOUR DRAIN.THIS CAUSES BLOCKAGES AND OVERFLOWS WHICH CAN CAUSE DAMAGE TO HOMES AND THE SEWER COLLECTION SYSTEM AND IMPACTS OUR COMMUNITY’S LOCAL WATER WAYS.”

“To report illicit dumping, illicit discharges, and erosion and sediment control violations please contact the Tuscumbia Public Works Department by calling (256) 386-5674 or emailing bostan29@comcast.net”

<https://cityoftuscumbia.org/departments/public-works/>

- Ordinance for Illicit Discharge
- Ordinance for Stormwater Operation
- Ordinance for Erosion and Sediment Control
- Contacts for IDDE

Utility Bills Notifications: Statements asking citizens to help prevent stormwater pollution and describing actions to take are periodically placed on utility bills before mailing – June 22, 2022.

BMP No. 2: Run-Off Reduction/ Permeable Pavement

Challenge: The main source of pollution addressed by this BMP is soil erosion during construction.

BMP Rationale: Most of the soil erosion and introduction of silt into the stormwater system is due to construction activities which disturb the landscape. By placing restrictions of this BMP on contractors and developers, soil erosion will be better managed and improve water quality. Requirements are outlined in the subdivision regulations, SWMP, and the new stormwater ordinances.

Activities:

Ongoing: Regulations and ordinances now dictate that contractors and developers will adhere to the rules which have been adopted to control erosion. The City requires engineers to provide monthly inspection reports for the City to review. The City's staff also provided inspection and enforcement of the rules. BMP for each project exceeding one acre is required and is reviewed by the City Review Office. Permits are required before excavation or prior to any soil disturbance.

2023-2024 Activities: The frequency of action is continual. Every construction project is reviewed for compliance with the city regulations. See link for City Ordinances related to erosion control:

http://cityoftuscumbia.org/wp-content/uploads/2018/05/Ordinance_for_Erosion_and_Sediment_Control.pdf

BMP No. 4 - Storm Drain Inlet Protection and Public Awareness

Challenge: Storm drains are an easy and visible way to dump unwanted materials. However, when the public is made aware that the storm drains lead to creeks and rivers, they are less likely to dump materials in the storm drains.

BMP Rationale: To make the public aware of the harm to dumping material in the storm drain.

Activities:

Ongoing - Approximately 175 Storm Drain labels have been applied at inlets to date throughout the city.

Ongoing - Increased the number of participations in specific events

Ongoing - Continuing to work with KTSB to educate the public through online and in person efforts

Extra Information:

Stormwater FAQs and Sewer Do's and Don'ts were published on the City's website for the public. See link <https://www.docdroid.net/Byvx5hK/tuscumbia-sewer-dos-and-donts.pdf>

2023/2024 Public Education and Outreach Evaluation:

Due to COVID, the in-person activities were limited during 2021, but resumed to mostly full scale in 2022. The result of the public education and involvement is the community becoming more involved every year to limit potential stormwater impacts to receiving streams. In addition, City staff is becoming more involved as stakeholders. They are encouraged by the volume of “Chunk the Junk” and curbside solid waste (2500 tons) being collected to be properly disposed in the local landfill and for recycling.

Measure Specific Activities Planned for the next Reporting Period

During this next reporting period, City of Tuscumbia plans to continue to promote the MS4 Public Education and Outreach best management measures to include at a minimum:

1. Continue ongoing activities related to public education and outreach.
2. Continue to work with KTSB to help initiate public education and outreach programs.
3. Increase the number of participations in specific events.
4. Increase the efficiency of record keeping and documentation related to public education activities.
5. Continue working to label storm drain inlets to promote public education regarding impacts.

II. Public Involvement and Participation

Challenge: The challenge addressed in this BMP is associated mainly with littering by the public and the general disregard for erosion and pollution problems.

BMP Rationale: The rationale for this BMP is to create ownership and transparency for citizens. That is, the more they are involved with the decision-making process and cleanup activities, the more they will be aware of the problems related to litter and erosion. Public involvement and participation helps to increase general awareness and concern over these issues. These activities also involve environmentally concerned individuals and help get citizens involved in reporting violations to be enforced by City officials.

Activities:

Ongoing: Citizens are encouraged to clean up their areas and to stop littering and notify City officials of littering and erosion issues. The City has also participated in the Groundwater Guardian Program, which is a committee of local officials, business owners, and concerned citizens that implements educational programs for children and adults about the importance of protecting the natural groundwater resources in the area. This committee continues to distribute literature and promote education programs.

2022-2024 Activities:

Public Hearing: We are proposing to have one during the Fall of 2024 calendar year as part of a monthly City Council meeting. In this effort, the Stormwater Committee will be presented to City Council and the public the goals and objectives of the current SWMPP.

Shoals Solid Waste Authority (SSWA): This organization is supported by the City with funding and to help with drop off locations.

"Keep the Shoals Beautiful" (KTSB): This organization is supported by the City with annual financial support. Special public involvement projects included:

<https://www.facebook.com/KeepTheShoalsBeautiful>

- Jazz Up With Trash (7/27/23)

BMP No. 2: Stenciling at Stormwater Inlets

Challenge: The challenge addressed in this BMP is associated mainly with illicit dumping by the general public into stormwater system inlets. Approximately 175 Storm Drain labels have been applied at inlets to date throughout the City. More are planned for 2023.

BMP Rationale: The rationale for this BMP is to make citizens aware that whatever enters a stormwater inlet may eventually enter our rivers and streams. This awareness should reduce the number of illicit discharges by the public.

Activities:

2023-2024 Activities: The City of Tuscumbia Public Works Department continues to maintain and install curb tags at storm drains around the City.

BMP No. 3 - Art Contest at Elementary Schools

Challenge: The challenge addressed in this BMP is associated mainly with littering and the general disregard for pollution problems. Since COVID, it has been difficult to schedule but hopefully it will resume.

BMP Rationale: the rationale for this BMP is that good habits are best learned at a young age. If our children can be involved in litter prevention and become aware of the issues related to pollution, they will be more proactive as adults.

Activities:

2023-2024 Activities:

"Keep the Shoals Beautiful" (KTSB): This organization is supported by the City with annual financial support. Special projects focusing on elementary schools include:

- KTSB has ongoing programs that support and initiate local school programs promoting sustainability.

2023/2024 Public Education and Outreach Evaluation:

The result of the public education and involvement is the community is becoming more involved every year to limit potential stormwater impacts to receiving streams. In addition, City staff is becoming more involved as stakeholders. They are encouraged by the volume of “Chunk the Junk, Spring Park Cleanup, CityWide Cleanups and curbside solid waste (approximately 2000 tons) being collected to be properly disposed in the local landfill and for recycling.

The ongoing collection of solid waste and debris (approximately 2500 tons) performed by the City Street Department positively impacts the water quality and esthetics of Spring Creek and its tributaries. The City will continue to work toward improving the public participation elements of the program.

Measure Specific Activities Planned for the Next Reporting Period

Tuscumbia will continue to implement the Public Involvement & Participation measures as defined in the City’s SWMP. During the next reporting period, the following activities are planned:

1. Continue to work with the *Shoals Solid Waste Authority (SSWA)* in partnership regarding public awareness of water quality and litter control.
2. Continue to work with the *Keep the Shoals Beautiful (KTSB)* in partnership regarding public awareness of water quality and litter control.
3. Work with local schools regarding public awareness of water quality and litter control.
4. Continue to increase the efficiency of record keeping and documentation related to public awareness activities.

III. Illicit Discharge Detection & Elimination

BMP No. 1: Enforcement Personnel to Re-certify QCI

Challenge: The problem addressed with this BMP is the lack of training regarding the effects of illicit discharges, proper BMP measures and the lack of enforcement of City ordinances.

BMP Rationale: The rationale for this BMP is that an enforcement process is necessary to work toward eliminating the problem associated with illicit discharges. City officials will be informed and trained regarding the hazards associated with illicit discharges and proper BMP measures.

Activities:

Ongoing: All ordinance requirements related to illicit discharges were completed prior to 2010. Mr. Greg Willingham (QCI), with the City of Tuscumbia, is responsible for BMP review and code enforcement. See webpage link:

http://cityoftuscumbia.org/wp-content/uploads/2018/05/Ordinance_for_Illicit_Discharge.pdf

2023-2024 Activities: Greg Willingham is certified QCI - QCI#73967.

BMP No. 2: Site Inspections - Industrial, Commercial, Construction Sites

Challenge: The problem addressed with this BMP is the illicit discharge by industrial, commercial sites, and construction sites into the City stormwater system.

BMP Rationale: The rationale for this BMP is that an inspection process is necessary to identify illicit discharges and enable the City to enforce the ordinances related to such discharges.

Activities:

Ongoing: Greg Willingham recertified was extended in 2023-24 – QCI #73967. The City continues to conduct routine inspections of the stormwater discharge points and other sites. The records of certifications and facility inspections are kept on file at City Hall.

2023-2024 Activities: The City's QCIs conducted approximately 30 onsite construction site inspections and observations conducted at nine (6) ongoing construction sites in the City. There were no referrals based on inspections. There were no construction site complaints received during the reporting year.

BMP No. 3: Stormwater Runoff Monitoring & 303(d) Spring Creek Stream Sampling

Challenges: The problem addressed with this BMP is stream contamination caused by illicit discharges and stormwater runoff.

BMP Rationale: The rationale for this BMP is that sampling and monitoring stormwater at the known outfall of the City's stormwater system will help to identify issues, so further inspection and enforcement can take place. Also, seasonal monthly stormwater (dry weather) monitoring will be conducted on Spring Creek at specific locations identified in the SWMPP during seasonal months triggered by rainfall and dry events. The SWMPP identifies four (4) sampling locations along Spring Creek. (Upstream, Instream, and Downstream) that are sampled semi-annually.

Activities:

Ongoing: GIS mapping has occurred on approximately 50% of the city's stormwater drain inlets and the stormwater collection system and a map was created. Locations along Spring Creek have been delineated as seasonal (dry weather) monitoring points, and they continue to be monitored for City impact. In addition, Spring Creek sampling is conducted semi-annually.

2023-2024 Activities: According to the SWMPP, four locations along Spring Creek were chosen as required by the SWMPP related to 303(d) listing requirements. According to the data collected during the 2021/2022 reporting period, it again appears that the City of Tuscumbia is not a significant contributor to the current 303(d) impairments. During the 2020 and 2022 SWMPP updates, the plans would determine the reducing Spring Creek monitoring to semi-annual. During the 2022/2023 monitoring period, samples were collected on 4/18/22 and 12/14/22. (See Appendix A: Spring Creek 2023/2024 Sampling Data.

2023/2024 Illicit Discharge Detection and Elimination Evaluation:

In 2017, the City of Tuscumbia sampling program was established in the SWMPP, per permit requirements, as a measure to determine the degree of impact to Spring Creek. (303(d) listed impairments - nutrient and agricultural siltation). Dry weather inspections were conducted throughout the reporting period to determine possible illicit discharge point. During the 2020 and 2022 SWMPP updates, the plans

would determine the reducing Spring Creek monitoring to semi-annual. In addition, during the 2021/2022 monitoring period, samples were collected in 5/10/23 and 12/10/23. (See Appendix A: Spring Creek 2023/2024 Monitoring Data)

2023/2024 Activities: During the monitoring period, ten (22) dry weather screening inspections were conducted at different pipe discharge outfalls to Spring Creek by City QCI. All inspection reports are kept at City Hall. Spring Creek was sampled eight (8) times at 4 different locations along Spring Creek by ENERSOLV staff.

Measure Specific Activities Planned for the next Reporting Period

The City of Tuscumbia will continue the Illicit Discharge Detection and Elimination measures as defined in the City's SWMPP. During the next reporting period, the following activities are planned:

1. Continue to promote the objectives of the measure through education and outreach activities.
2. Train additional City personnel to support the IDDE control measures.
3. Increase the quantity of training to support the IDDE control measures.
4. Continue to collect curbside solid waste debris for landfill disposal.
5. Continue to educate the public regarding potential impacts in the community.
6. Continue to inform the public related to WWTP collection system clogging leading to SSOs.
7. Increase the efficiency of record keeping and documentation related to IDDE activities.
8. Continue dry weather screenings and monitoring
9. Continue Spring Creek sampling and monitoring

IV. Construction Site Stormwater Runoff Control

BMP No. 1: Construction Sites Permitted by City and ADEM

Challenge: The challenge addressed with this BMP is the runoff of silt and other illicit discharges into the City stormwater system from construction sites.

BMP Rationale: The rationale for this BMP is that by requiring contractors to follow the permitting process for stormwater runoff, they will be given the proper BMP measures to follow to minimize erosion and illicit discharges. These permits also include regular inspections that will hold them accountable to the permit requirements.

Activities:

Ongoing: The City addresses erosion and sediment controls at construction sites through subdivision regulations and ordinances. These are enforceable by City officials and apply to non-subdivision type construction projects. Mr. Greg Willingham, with the City of Tuscumbia, is responsible for reviewing all inspection reports, keeping a copy on file, and enforcing all related ordinances and regulations. See City Ordinance links for Stormwater Operations and Erosion Control:

http://cityoftuscumbia.org/wp-content/uploads/2018/05/Ordinance_for_Stormwater_Operation.pdf

http://cityoftuscumbia.org/wp-content/uploads/2018/05/Ordinance_for_Erosion_and_Sediment_Control.pdf

2023-2024 Activities: Approximately Fifteen (40) onsite construction inspection/observations were recorded as being conducted during the monitoring period. There were no referrals based on inspections. There were no construction site complaints received during the reporting year. Inspection record-keeping is located at the Building Department.

BMP No. 2: Follow Up on Inspections If Required

Challenge: The challenge addressed with this BMP is the lack of concern of the holder of the stormwater permit to address deficiencies noted in the inspection reports.

BMP Rationale: The rationale for this BMP is that an enforcement process is necessary to ensure compliance with the permitting requirements.

Activities:

Ongoing: Follow up inspections of permitted construction sites is a current activity by the City Building Department and conducted as needed. Copies of inspection reports outlining any problems or deficiencies are held at City Hall.

2023-2024 Activities: Follow-up inspections were conducted based on the extent of the conditions at the site to achieve compliance.

BMP No. 3: Construction Stormwater Runoff Sampling and Testing

Challenge: The problem addressed with this BMP is stream contamination caused by erosion of silt and/or illicit discharges.

BMP Rationale: The rationale for this BMP is that sampling and testing stormwater runoff from construction sites should ensure the contractor's compliance with BMP measures and determine if additional measures need to be put in place.

Activities:

2023-2024 Activities: No samples were collected from discharges from construction sites during the sampling period. However, sampling was conducted on four Spring Creek sampling/monitoring points during the seasonal monitoring period to establish instream water quality baseline data and potential impacts. (See Appendix A: Spring Creek Sampling Data)

2023/2024 Construction Site Stormwater Runoff Control Evaluation:

Even though construction inspections are performed by the City, there is a further need to notify and inform ADEM if construction activities become non-complaint with City Ordinance requirements. Also, the same measures will be initiated on sites that require an ADEM Construction General Permit. During the monitoring period fifteen (15) Daily Observation Inspections were performed on four active locations.

Measure Specific Activities Planned for the Next Reporting Period

The City of Tuscumbia will continue implementing Construction Site Stormwater Runoff Control as defined in the City's SWMPP. During the next reporting period, the following activities are planned:

1. Continue program implementation to ensure the requirements of the BMPs are met.

2. To have a third-party consultant (Enersolv Corp) perform audits of programs in accordance with Environmental Management System (EMS).
3. To have third-party (Enersolv Corp) increase and develop training programs for personnel to better communicate the Program's requirements and the responsibilities of everyone involved in the construction and enforcement process.
4. Increase the efficiency of record keeping and documentation related to construction and IDDE activities.

V. Post Construction Stormwater Management in New Development and Re-Development

BMP No. 2: Post Construction Maintenance Agreements

Challenge: The problem addressed with this BMP is that once some developments are completed, the site is not maintained for sediment and erosion control.

BMP Rationale: The rationale for this BMP is it will ensure the long term operation and maintenance of sediment and erosion control measures by requiring owners to sign an agreement to be recorded with the property deed or plat that transfers to any new owner or operator the responsibility for post-construction management.

Activities:

Ongoing: This requirement is monitored with existing ordinances and regulations. The City continues to require a Post-Construction Maintenance Agreement to be recorded with the final plat.

2023-2024 Activities: There is only one post construction pond located in the city and it is completely stable at this time. Therefore, no inspections were made at the (Dollar General Pond).

2023/2024 Construction Site Stormwater Runoff Control Evaluation:

The City only has one facility, that has a permanent post-construction structure. Inspections are conducted once per month to determine the potential for downstream water quality impacts. Measures will continue to be initiated to improve this element of the program.

Measure Specific Activities Planned for the Next Reporting Period

The City of Tuscumbia will continue implementation of Post Construction Stormwater Management in new development and redevelopment as defined in the SWMPP. During the next reporting period, the following activities are planned:

1. Continue to work toward the implementation of system standards and plan review as defined in the SWMPP.
2. Provide training on standards and requirements for new projects related to post construction maintenance.
3. Initiate implementing a maintenance schedule and/or observations of control measures.
4. Increase the efficiency of record keeping and documentation related to post-constructions maintenance activities.

VI. Pollution Prevention / Good Housekeeping for Municipal Operations

BMP No. 1: Personnel Training

Challenge: The problem addressed with this BMP is City personnel not adequately trained and aware of BMP requirements and the effects of pollution.

BMP Rationale: The rationale for this BMP is that many of the City personnel can prevent pollution and erosion or at least observe the activities of others. By adequately training them in proper BMP requirements, it will help to ensure good housekeeping practices and pollution prevention through personal training or notification of observed violations.

Activities:

Ongoing: The City continues to educate employees through training and conferences.

2023-2024 Activities: Greg Willingham was certified as QCI - QCI#73967 (Expires March 29, 2023). ENERSOLV held a City BMP Training session on February 1, 2023 at Sweet Peppers Restaurant in Muscle Shoals.

The Building Department maintains copies of the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas (Volumes 1 & 2) for use and reference by City officials.

BMP No. 2: Solid Waste Collection from Streets and Drains

Challenge: The challenge addressed with this BMP is the polluted runoff that occurs when runoff from impervious areas wash litter and other floatables into the stormwater system.

BMP Rationale: The rationale for this BMP is that by collecting solid waste from streets and drains will prevent it from getting into the stormwater system and making its way into rivers and streams.

Activities:

Ongoing: The City continues to conduct regular surveys throughout the city for litter and collects it for proper disposal. Records are kept and reported each year as to the total tonnage of litter retrieved and disposed of at the landfill. They also pick up leaves piled up along gutters by citizens from October through March.

2023-2024 Activities: The Public Works Department cleaned out numerous storm drains and gutters and collected litter to prevent it from reaching the storm system. This prevented debris from reaching Spring Creek. See below:

- **Municipal Inspections:** Monthly inspections were conducted at the seven facilities for City SOP issues. Twenty one (20) inspections were conducted during the monitoring period.
- **Storm Drains Monitored:** Ten (39) locations were monitored during the reporting period.
- **Routine Litter Cleanup/ Right-of-Way Maintenance:** Material was removed as the result of citywide clean ups. As a composite of the city-wide cleanup and roadside debris removal,

approximately 2000 tons of debris and solid waste was removed from and prevented from entering the waters of the State during the reporting period.

- ***Municipal Facilities and SOPs:*** The City has seven municipal facility locations that are monitored on a routine basis. The City has developed SOPs for operation at these seven facilities to help preclude the introduction of stormwater pollutants.
- ***Sewer Maintenance:*** Contracted 3rd party vendors as needed to preclude City's impact on water quality of receiving streams. Approximately twenty (5) sewer locations were maintained to preclude SSOs from impacting local water quality.

2023/2024 Pollution Prevention / Good Housekeeping for Municipal Operations Evaluation:

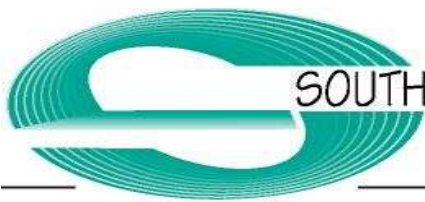
The ongoing progress of the municipal inspections, storm drain monitoring, litter cleanup, and right-of-way maintenance is one of the City's solid points for improving water quality. These measures help to provide a framework of BMPs that offer a significant impact. The City's MS4 program will continue to capitalize on these efforts to educate, provide water quality protection and inform City employees and the public regarding water quality protection.

Measure Specific Activities Planned for the Next Reporting Period

The City of Tuscumbia will continue to perform and promote sound pollution prevention and good housekeeping management practices. During the next reporting period, the following activities are planned:

1. Continue to train City personnel related to pollution prevention and good housekeeping of municipal facilities.
2. Continue to educate the public on water quality, illicit discharges, and litter control.
3. Continue to conduct routine inspections of facilities related to SOP implementation activities.
4. Continue to conduct routine and special litter cleanup days and right-of-way maintenance to preclude water quality impacts.
5. Increase the efficiency of record keeping and documentation related to good housekeeping and pollution prevention activities.
6. Increase sampling at stormwater outfalls.

Appendix A - 2023/2024 Spring Creek Monitoring Laboratory Reports



SOUTHERN ENVIRONMENTAL TESTING

December 18, 2023

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
DD11696-01	Tuscumbia Spring Creek SC-1	12/10/2023	12/11/2023

This cover page and the attached chain-of-custody record(s) are integral parts of your report. Southern Environmental Testing considers this report your official record. This information shall remain in Southern Environmental Testing's active database for a period of one (1) calendar year before archiving. Any replacement of this information after archiving may result in an administrative fee to cover the cost of retrieval.

If you have any questions or would like more information regarding these analyses, please call our Decatur facility at (256) 280-2567 or our Florence facility at (256) 740-5532.

Taylor Terrell
Project Manager

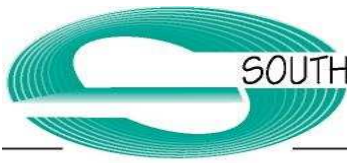
Reviewed by:

3103 Northington Court
Florence, AL 35630
(256) 740-5532

PO Box 487
Florence, AL 35630
(256) 740-5529 Fax

2919 Fairgrounds Road SW
Decatur, AL 35603
(256) 280-2567

PO Box 2084
Decatur, AL 35602
(256) 350-0686 Fax



SAMPLE RESULTS REPORT

Report Date/Time: 12/18/2023 11:58

REPORT TO
Ricky McWhorter City of Tuscumbia 202 East 6th St Tuscumbia, AL 35674

This report may contain information that is confidential and/or proprietary. This information is intended for the addressee only and may not be copied or disseminated except in full without the written consent of Southern Environmental Testing.

Analyte Name	Result	Units	Qualifier	Regulatory Limit
--------------	--------	-------	-----------	------------------

Sample Point: Tuscumbia Spring Cree Sample ID: DD11696-01 Collected: 12/10/2023 Submitted: 12/11/2023

Anions by IC

Nitrite-Nitrogen	<0.100	mg/l		
Nitrate-Nitrogen	0.531	mg/l		
Nitrate plus Nitrite-Nitrogen	<0.600	mg/l		

Inorganics

Total Alkalinity	167	mg/l CaCO3		
Carbonaceous BOD	<2.00	mg/l		
Conductance	350.0	umho/cm		
Ammonia-Nitrogen	<0.100	mg/l		
Total Kjeldahl Nitrogen	0.875	mg/l		
Total Suspended Solids	<2.50	mg/l		

Metals by ICP-OES

Total Calcium	62.2	mg/l		
Total Hardness	171	mg/l CaCO3		
Total Magnesium	3.71	mg/l		
Total Phosphorus	0.0391	mg/l		

On-Site Analysis

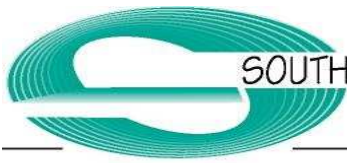
Dissolved Oxygen	9.30	mg/l		
pH	7.2	su		

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SAMPLE RESULTS REPORT

Report Date/Time: 12/18/2023 11:58

REPORT TO
Ricky McWhorter City of Tuscumbia 202 East 6th St Tuscumbia, AL 35674

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Data Qualifiers

< Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
DD11696-01	Total Hardness	[CALC]	FLY	Florence	12/10/2023 06:45	12/13/2023 10:38	
DD11696-01	Calcium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 06:45	12/13/2023 10:38	
DD11696-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 06:45	12/13/2023 10:38	
DD11696-01	Total Phosphorus	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 06:45	12/13/2023 10:38	
DD11696-01	Nitrate-Nitrogen	EPA 300.0, Rev 2.1	LLW	Decatur	12/10/2023 06:45	12/11/2023 11:28	
DD11696-01	Nitrite-Nitrogen	EPA 300.0, Rev 2.1	LLW	Decatur	12/10/2023 06:45	12/11/2023 11:28	
DD11696-01	Ammonia-Nitrogen	FIAlab 100	DS	Decatur	12/10/2023 06:45	12/12/2023 06:18	
DD11696-01	Total Kjeldahl Nitrogen	FIAlab 100	RAC	Decatur	12/10/2023 06:45	12/12/2023 06:30	
DD11696-01	Total Alkalinity	SM 2320B-2011	MS	Decatur	12/10/2023 06:45	12/12/2023 07:15	
DD11696-01	Conductance	SM 2510B-2011	SH	Decatur	12/10/2023 06:45	12/11/2023 15:10	
DD11696-01	Carbonaceous BOD	SM 5210 B-2016	MS	Decatur	12/10/2023 06:45	12/12/2023 06:40	12/17/2023 08:30
DD11696-01	Total Suspended Solids	USGS I-3765-85	JRW	Decatur	12/10/2023 06:45	12/11/2023 15:00	

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
(256) 350-0846

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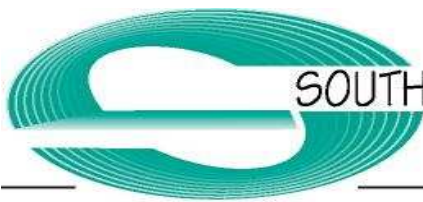
COMPANY/CLIENT NAME ENERSOLV	CLIENT P.O. NUMBER ENE 13886 RMCWHORTER	ENERSOLV PROJECT NUMBER ENE 13886 RMCWHORTER
CLIENT POINT OF CONTACT R. McWhorter	CLIENT PHYSICAL ADDRESS 2220 Beltline Rd	CITY/STATE/ZIP Decatur, AL 35601
CLIENT EMAIL rmcwhorter@enersolv.com	PHONE NUMBER 256-566-9220	OTHER INFORMATION Tuscumbia Spring Creek
SAMPLE COLLECTED BY R. McWhorter	EXPEDITED REPORT DELIVERY (SURCHARGE)	DATE DUE (REQUIRED)

REQUESTED ANALYSES

ENERSOLV LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB COMP	ALK	CBOD	COND	DO	HARD	NH3	NO3NO2IC	PH	TKN	TSS
11696-1	Tuscumbia Spring Creek SC-1	12/10/23	0645	X	X	X	X	X	X	X	X	X	X	X

Comments: FLOW Collector to complete shaded areas, as applicable
 PH cal. 12/10/23 7.0-10.0
 DO cal. 12/10/23 99%
 12/10/23

SAMPLER INFORMATION		FIELD INFORMATION				Qty	Type	Parameters
Start Date	pH SU	TRC mg/l	DO mg/l	Temp deg C	1	Poly 1/2 Cool 6c	Alk, CBOD, NO3NO2, TSS, Cond	
Start Time	Date	Date	Date	Date				
Stop Date	Time	Time	Time	Time	1	Poly Pint HNO3 Cool 6c	Hard	
Stop Time	Analyst	Analyst	Analyst	Analyst				
	SM 4500H+B	SM 4500-CI D	SM 4500-O G	SM 2550B	1	Poly Pint H2SO4 Cool 6c	NH3, P, TKN	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	
<i>R. McWhorter</i>	12/10/23	1000						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	
<i>Paul Stephens</i>	12/11/23	10:00						
RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:					
			<input type="checkbox"/> Accepted <input type="checkbox"/> Rejected <input type="checkbox"/> Accepted with Exception					



SOUTHERN ENVIRONMENTAL TESTING

December 18, 2023

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
DD11697-01	Tuscumbia Spring Creek SC-2	12/10/2023	12/11/2023

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Taylor Terrell
Project Manager

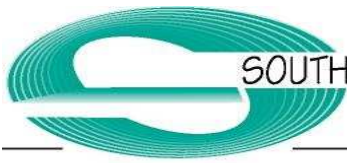
Reviewed by:

3103 Northington Court
Florence, AL 35630
(256) 740-5532

PO Box 487
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(256) 740-5529 Fax

2919 Fairgrounds Road SW
Decatur, AL 35603
(256) 280-2567

PO Box 2084
Decatur, AL 35602
(256) 350-0686 Fax



SAMPLE RESULTS REPORT

Report Date/Time: 12/18/2023 12:00

REPORT TO
Ricky McWhorter City of Tuscumbia 202 East 6th St Tuscumbia, AL 35674

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Analyte Name	Result	Units	Qualifier	Regulatory Limit
--------------	--------	-------	-----------	------------------

Sample Point: Tuscumbia Spring Cree Sample ID: DD11697-01 Collected: 12/10/2023 Submitted: 12/11/2023

Anions by IC

Nitrite-Nitrogen	<0.100	mg/l		
Nitrate-Nitrogen	0.530	mg/l		
Nitrate plus Nitrite-Nitrogen	<0.600	mg/l		

Inorganics

Total Alkalinity	171	mg/l CaCO3		
Carbonaceous BOD	<2.00	mg/l		
Conductance	351.0	umho/cm		
Ammonia-Nitrogen	<0.100	mg/l		
Total Kjeldahl Nitrogen	1.42	mg/l		
Total Suspended Solids	<2.50	mg/l		

Metals by ICP-OES

Total Calcium	62.9	mg/l		
Total Hardness	173	mg/l CaCO3		
Total Magnesium	3.75	mg/l		
Total Phosphorus	0.0410	mg/l		

On-Site Analysis

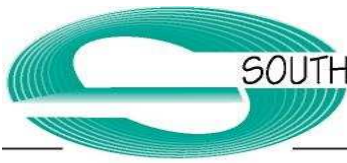
Dissolved Oxygen	9.30	mg/l		
pH	7.0	su		

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SAMPLE RESULTS REPORT

Report Date/Time: 12/18/2023 12:00

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Data Qualifiers

< Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
DD11697-01	Total Hardness	[CALC]	FLY	Florence	12/10/2023 07:00	12/13/2023 10:38	
DD11697-01	Calcium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 07:00	12/13/2023 10:38	
DD11697-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 07:00	12/13/2023 10:38	
DD11697-01	Total Phosphorus	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 07:00	12/13/2023 10:38	
DD11697-01	Nitrate-Nitrogen	EPA 300.0, Rev 2.1	LLW	Decatur	12/10/2023 07:00	12/11/2023 12:04	
DD11697-01	Nitrite-Nitrogen	EPA 300.0, Rev 2.1	LLW	Decatur	12/10/2023 07:00	12/11/2023 12:04	
DD11697-01	Ammonia-Nitrogen	FIAlab 100	DS	Decatur	12/10/2023 07:00	12/12/2023 06:18	
DD11697-01	Total Kjeldahl Nitrogen	FIAlab 100	RAC	Decatur	12/10/2023 07:00	12/12/2023 06:30	
DD11697-01	Total Alkalinity	SM 2320B-2011	MS	Decatur	12/10/2023 07:00	12/12/2023 07:15	
DD11697-01	Conductance	SM 2510B-2011	SH	Decatur	12/10/2023 07:00	12/11/2023 15:10	
DD11697-01	Carbonaceous BOD	SM 5210 B-2016	MS	Decatur	12/10/2023 07:00	12/12/2023 06:40	12/17/2023 08:30
DD11697-01	Total Suspended Solids	USGS I-3765-85	JRW	Decatur	12/10/2023 07:00	12/11/2023 15:00	

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
 2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
 (256) 350-0846

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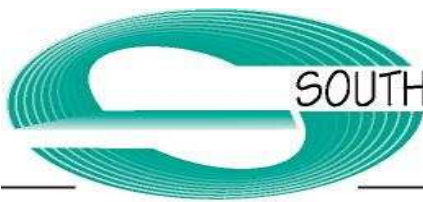
COMPANY/CLIENT NAME ENERSOLV		CLIENT P.O. NUMBER ENE 13886 RMCWHORTER	
CLIENT POINT OF CONTACT R. McWhorter		CITY/STATE/ZIP Decatur, AL 35601	
CLIENT EMAIL rmcwhorter@enersolv.com		OTHER INFORMATION Tuscumbia Spring Creek	
PHONE NUMBER 256-566-9220		EXPEDITED REPORT DELIVERY (SURCHARGE)	
SAMPLE COLLECTED BY R. McWhorter		DATE DUE (REQUIRED)	
ENERSOLV LAB NUMBER 2011697-1	SAMPLE DESCRIPTION Tuscumbia Spring Creek SC-2	SAMPLE TRANSFER/GRAB DATE 12/10/23	SAMPLE TRANSFER/GRAB TIME 0700
		ALK	X
		CBOD	X
		COND	X
		DO	X
		HARD	X
		NH3	X
		NO3NO2IC	X
		POTAL	X
		PH	X
		TKN	X
		TSS	X

REQUESTED ANALYSES

Comments:
FLOW
 Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE RECEIVED @ **1.0**

SAMPLER INFORMATION		FIELD INFORMATION				Qty	Type	Parameters
Start Date	pH	TRC	DO	Temp	1	Poly 1/2 Cool 6c	Alk, CBOD, NO3NO2, TSS, Cond	
Stop Date	su	mg/l	mg/l	deg C				
Start Time	Date	Date	Date	Date				
Stop Time	Time	Time	Time	Time	1	Poly Pint HINO3 Cool 6c	Hard	
	Analyst	Analyst	Analyst	Analyst				
	SM 4500H+B	SM 4500-CLD	SM 4500-O G	SM 2550B	1	Poly Pint H2SO4 Cool 6c	NH3, P, TKN	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	
<i>[Signature]</i>	12/10/23	1000	<i>[Signature]</i>	12/10/23		<i>[Signature]</i>		
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	
<i>[Signature]</i>								
RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	DATE	TIME	DATE	DATE	TIME	
<i>[Signature]</i>	12/11/23	10:00						
SAMPLE STATUS: <input type="checkbox"/> Accepted <input type="checkbox"/> Rejected <input type="checkbox"/> Accepted with Exception								



SOUTHERN ENVIRONMENTAL TESTING

December 18, 2023

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
DD11698-01	Tuscumbia Spring Creek SC-3	12/10/2023	12/11/2023

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Taylor Terrell
Project Manager

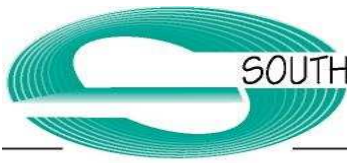
Reviewed by:

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Decatur, AL 35602
(256) 350-0686 Fax**



SAMPLE RESULTS REPORT

Report Date/Time: 12/18/2023 12:04

REPORT TO
Ricky McWhorter City of Tuscumbia 202 East 6th St Tuscumbia, AL 35674

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Analyte Name	Result	Units	Qualifier	Regulatory Limit
--------------	--------	-------	-----------	------------------

Sample Point: Tuscumbia Spring Cree Sample ID: DD11698-01 Collected: 12/10/2023 Submitted: 12/11/2023

Anions by IC

Nitrite-Nitrogen	<0.100	mg/l		
Nitrate-Nitrogen	2.19	mg/l		
Nitrate plus Nitrite-Nitrogen	2.19	mg/l		

Inorganics

Total Alkalinity	201	mg/l CaCO3		
Carbonaceous BOD	<2.00	mg/l		
Conductance	466.0	umho/cm		
Ammonia-Nitrogen	<0.100	mg/l		
Total Kjeldahl Nitrogen	0.984	mg/l		
Total Suspended Solids	<2.50	mg/l		

Metals by ICP-OES

Total Calcium	82.3	mg/l		
Total Hardness	220	mg/l CaCO3		
Total Magnesium	3.46	mg/l		
Total Phosphorus	0.0367	mg/l		

On-Site Analysis

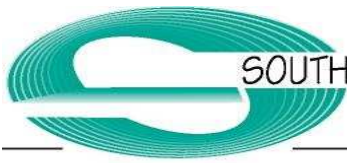
Dissolved Oxygen	7.90	mg/l		
pH	6.8	su		

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SAMPLE RESULTS REPORT

Report Date/Time: 12/18/2023 12:04

REPORT TO
Ricky McWhorter City of Tuscumbia 202 East 6th St Tuscumbia, AL 35674

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Data Qualifiers

< Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
DD11698-01	Total Hardness	[CALC]	FLY	Florence	12/10/2023 07:10	12/13/2023 10:38	
DD11698-01	Calcium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 07:10	12/13/2023 10:38	
DD11698-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 07:10	12/13/2023 10:38	
DD11698-01	Total Phosphorus	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	12/10/2023 07:10	12/13/2023 10:38	
DD11698-01	Nitrate-Nitrogen	EPA 300.0, Rev 2.1	LLW	Decatur	12/10/2023 07:10	12/11/2023 12:16	
DD11698-01	Nitrite-Nitrogen	EPA 300.0, Rev 2.1	LLW	Decatur	12/10/2023 07:10	12/11/2023 12:16	
DD11698-01	Ammonia-Nitrogen	FIAlab 100	DS	Decatur	12/10/2023 07:10	12/12/2023 06:18	
DD11698-01	Total Kjeldahl Nitrogen	FIAlab 100	RAC	Decatur	12/10/2023 07:10	12/12/2023 06:30	
DD11698-01	Total Alkalinity	SM 2320B-2011	MS	Decatur	12/10/2023 07:10	12/12/2023 07:15	
DD11698-01	Conductance	SM 2510B-2011	SH	Decatur	12/10/2023 07:10	12/11/2023 15:10	
DD11698-01	Carbonaceous BOD	SM 5210 B-2016	MS	Decatur	12/10/2023 07:10	12/12/2023 06:40	12/17/2023 08:30
DD11698-01	Total Suspended Solids	USGS I-3765-85	JRW	Decatur	12/10/2023 07:10	12/11/2023 15:00	

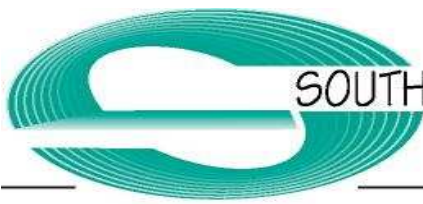
3103 Northington Court
Florence, AL 35630
(256) 740-5532

PO Box 487
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SOUTHERN ENVIRONMENTAL TESTING

December 18, 2023

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
DD11699-01	Tuscumbia Spring Creek SC-4	12/10/2023	12/11/2023

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If you have any questions or would like more information regarding these analyses, please call our Decatur facility at (256) 280-2567 or our Florence facility at (256) 740-5532.

Taylor Terrell
Project Manager

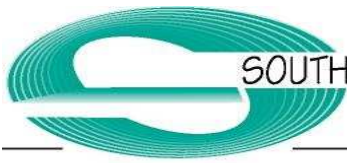
Reviewed by:

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Florence, AL 35630
(256) 740-5532**

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SAMPLE RESULTS REPORT

Report Date/Time: 12/18/2023 12:21

REPORT TO
Ricky McWhorter City of Tuscumbia 202 East 6th St Tuscumbia, AL 35674

This report may contain information that is confidential and/or proprietary. This information is intended for the addressee only and may not be copied or disseminated except in full without the written consent of Southern Environmental Testing.

Analyte Name	Result	Units	Qualifier	Regulatory Limit
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Sample Point: Tuscumbia Spring Cree Sample ID: DD11699-01 Collected: 12/10/2023 Submitted: 12/11/2023

Anions by IC

Nitrite-Nitrogen	<0.100	mg/l		
Nitrate-Nitrogen	2.17	mg/l		
Nitrate plus Nitrite-Nitrogen	2.17	mg/l		

Inorganics

Total Alkalinity	195	mg/l CaCO3		
Carbonaceous BOD	<2.00	mg/l		
Conductance	463.0	umho/cm		
Ammonia-Nitrogen	<0.100	mg/l		
Total Kjeldahl Nitrogen	1.09	mg/l		
Total Suspended Solids	14.0	mg/l		

Metals by ICP-OES

Total Calcium	81.8	mg/l		
Total Hardness	219	mg/l CaCO3		
Total Magnesium	3.55	mg/l		
Total Phosphorus	0.0489	mg/l		

On-Site Analysis

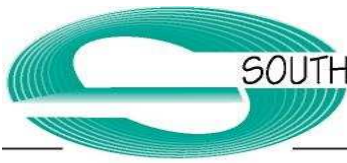
Dissolved Oxygen	8.90	mg/l		
pH	6.8	su		

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SAMPLE RESULTS REPORT

Report Date/Time: 12/18/2023 12:21

REPORT TO
Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

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Data Qualifiers

< Less than reporting limit

Analysis Information

Table with 8 columns: Lab Number, Analysis, Referenced Method, Analyst, SET Facility, Collection Date/Time, Analysis Start Date/Time, Analysis End Date/Time (BOD, CBOD, Coliforms). Rows include various tests like Total Hardness, Calcium, Magnesium, etc.

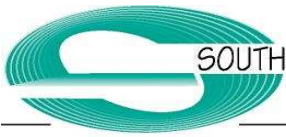
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May 18, 2023

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
FD01081-01	Tuscumbia Spring Creek SC-1	05/10/2023	05/11/2023

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Margaret Aiken
Project Manager

Reviewed by:

3103 Northington Court
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SAMPLE RESULTS REPORT

Report Date/Time: 05/18/2023 11:33

REPORT TO
Ricky McWhorter City of Tuscumbia 202 East 6th St Tuscumbia, AL 35674

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Analyte Name	Result	Units	Qualifier	Regulatory Limit
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Sample Point: Tuscumbia Spring Cree

Sample ID: FD01081-01

Collected: 05/10/2023

Submitted: 05/11/2023

Anions by IC

Nitrite-Nitrogen	0.203	mg/l		
Nitrate-Nitrogen	1.42	mg/l		
Nitrate plus Nitrite-Nitrogen	1.62	mg/l		

Inorganics

Total Alkalinity	153	mg/l CaCO3		
Carbonaceous BOD	2.58	mg/l		
Conductance	334.0	umho/cm		
Ammonia-Nitrogen	<0.100	mg/l		
Total Phosphorus	<0.100	mg/l		
Total Kjeldahl Nitrogen	1.77	mg/l	M	
Total Suspended Solids	2.75	mg/l		

Metals by ICP-OES

Total Calcium	58.8	mg/l		
Total Hardness	161	mg/l CaCO3		
Total Magnesium	3.33	mg/l		

On-Site Analysis

Dissolved Oxygen	8.00	mg/l		
pH	7.0	su		

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**SAMPLE RESULTS REPORT**

Report Date/Time: 05/18/2023 11:33

REPORT TO

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

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Data Qualifiers

M Sample matrix precluded reliable matrix spike/matrix spike duplicate recovery and/or precision. Non-homogeneity of sample or presence of interfering substances may result in spike recoveries outside acceptance limits.
 < Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
FD01081-01	Total Hardness	[CALC]	FLY	Florence	05/10/2023 18:00	05/12/2023 10:26	
FD01081-01	Calcium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	05/10/2023 18:00	05/12/2023 10:26	
FD01081-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	05/10/2023 18:00	05/12/2023 10:26	
FD01081-01	Nitrate-Nitrogen	EPA 300.0, Rev 2.1	WCC	Florence	05/10/2023 18:00	05/11/2023 13:30	
FD01081-01	Nitrite-Nitrogen	EPA 300.0, Rev 2.1	WCC	Florence	05/10/2023 18:00	05/11/2023 13:30	
FD01081-01	Ammonia-Nitrogen	FIAlab 100	RAC	Decatur	05/10/2023 18:00	05/12/2023 08:45	
FD01081-01	Total Kjeldahl Nitrogen	FIAlab 100	RAC	Decatur	05/10/2023 18:00	05/12/2023 09:50	
FD01081-01	Total Alkalinity	SM 2320B-2011	JD	Florence	05/10/2023 18:00	05/12/2023 08:20	
FD01081-01	Conductance	SM 2510B-2011	DRK	Florence	05/10/2023 18:00	05/16/2023 13:30	
FD01081-01	Total Suspended Solids	SM 2540D-2015	SEA	Florence	05/10/2023 18:00	05/12/2023 09:30	
FD01081-01	Total Phosphorus	SM 4500-P B,E-2011	FLY	Florence	05/10/2023 18:00	05/16/2023 12:06	
FD01081-01	Carbonaceous BOD	SM 5210 B-2016	SEA	Florence	05/10/2023 18:00	05/11/2023 14:40	05/16/2023 10:30

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(256) 350-0846

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COMPANY/CLIENT NAME ENERSOLV		CLIENT P.O. NUMBER		ENERSOLV PROJECT NUMBER ENE 13886 RMCWHORTER		REQUESTED ANALYSES									
CLIENT POINT OF CONTACT R. McWhorter		CLIENT PHYSICAL ADDRESS 2220 Beltline Rd		CITY/STATE/ZIP Decatur, AL 35601		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CLIENT EMAIL rmcwhorter@enersolv.com		PHONE NUMBER 256-566-9220		OTHER INFORMATION Tuscumbia Spring Creek		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SAMPLE COLLECTED BY R. McWhorter		EXPEDITED REPORT DELIVERY (SURCHARGE)		DATE DUE (REQUIRED)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
LAB NUMBER FD01081-01		SAMPLE DESCRIPTION Tuscumbia Spring Creek SC-1		SAMPLE TRANSFER/GRAB DATE 5/10/23		SAMPLE TRANSFER/GRAB TIME 0600		GRAB X		COMP X		ALK		CBOD	
						1930		X		X		COND		DO	
						1800		X		X		HARD		NH3	
								X		X		NO3NO2IC		P TOTAL	
								X		X		pH		TKN	
								X		X		TSS			

Comments:
FLOW *PH cal. 7.0-10.0 OK*
5/10/23 1755
Do. cal. YST
99% 5/10/23
1755

SAMPLER INFORMATION

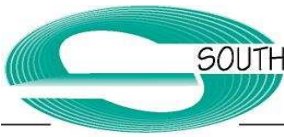
Start Date	Start Time	Stop Date	Stop Time	Analyst	FIELD INFORMATION	Qty	Type	Parameters
						1	Poly 1/2 Cool 6c	Alk, CBOD, NO3NO2, TSS Cond
						1	Poly Pint HNO3 Cool 6c	
						1	Poly Pint H2SO4 Cool 6c	NH3, P, TKN

RELINQUISHED BY: (SIGNATURE) *SM 4500H+B* **DATE** *5/10/23* **TIME** *1930*

RECEIVED BY: (SIGNATURE) *SM 4500-CI D* **DATE** *5/11/23* **TIME** *0700*

RECEIVED FOR LABORATORY USE BY: (SIGNATURE) *Michelle Sperry* **DATE** *5/11/23* **TIME** *0700*

SAMPLE STATUS: Accepted Rejected Accepted with Exception



May 18, 2023

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
FD01082-01	Tuscumbia Spring Creek SC-2	05/10/2023	05/11/2023

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If you have any questions or would like more information regarding these analyses, please call our Decatur facility at (256) 280-2567 or our Florence facility at (256) 740-5532.

Margaret Aiken
Project Manager

Reviewed by:

3103 Northington Court
Florence, AL 35630
(256) 740-5532

PO Box 487
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SAMPLE RESULTS REPORT

Report Date/Time: 05/18/2023 11:34

REPORT TO

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

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Analyte Name	Result	Units	Qualifier	Regulatory Limit
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Sample Point: Tuscumbia Spring Cree

Sample ID: FD01082-01

Collected: 05/10/2023

Submitted: 05/11/2023

Anions by IC

Nitrite-Nitrogen	0.232	mg/l		
Nitrate-Nitrogen	1.45	mg/l		
Nitrate plus Nitrite-Nitrogen	1.68	mg/l		

Inorganics

Total Alkalinity	154	mg/l CaCO ₃		
Carbonaceous BOD	<2.00	mg/l		
Conductance	336.0	umho/cm		
Ammonia-Nitrogen	<0.100	mg/l		
Total Phosphorus	<0.100	mg/l		
Total Kjeldahl Nitrogen	23.2	mg/l		
Total Suspended Solids	2.60	mg/l		

Metals by ICP-OES

Total Calcium	58.6	mg/l		
Total Hardness	160	mg/l CaCO ₃		
Total Magnesium	3.21	mg/l		

On-Site Analysis

Dissolved Oxygen	8.30	mg/l		
pH	7.1	su		

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**SAMPLE RESULTS REPORT**

Report Date/Time: 05/18/2023 11:34

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Tuscumbia, AL 35674

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Data Qualifiers

M Sample matrix precluded reliable matrix spike/matrix spike duplicate recovery and/or precision. Non-homogeneity of sample or presence of interfering substances may result in spike recoveries outside acceptance limits.
 < Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
FD01082-01	Total Hardness	[CALC]	FLY	Florence	05/10/2023 18:15	05/12/2023 10:26	
FD01082-01	Calcium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	05/10/2023 18:15	05/12/2023 10:26	
FD01082-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	05/10/2023 18:15	05/12/2023 10:26	
FD01082-01	Nitrate-Nitrogen	EPA 300.0, Rev 2.1	WCC	Florence	05/10/2023 18:15	05/11/2023 13:30	
FD01082-01	Nitrite-Nitrogen	EPA 300.0, Rev 2.1	WCC	Florence	05/10/2023 18:15	05/11/2023 13:30	
FD01082-01	Ammonia-Nitrogen	FIAlab 100	RAC	Decatur	05/10/2023 18:15	05/12/2023 08:45	
FD01082-01	Total Kjeldahl Nitrogen	FIAlab 100	RAC	Decatur	05/10/2023 18:15	05/12/2023 09:50	
FD01082-01	Total Alkalinity	SM 2320B-2011	JD	Florence	05/10/2023 18:15	05/12/2023 08:20	
FD01082-01	Conductance	SM 2510B-2011	DRK	Florence	05/10/2023 18:15	05/16/2023 13:30	
FD01082-01	Total Suspended Solids	SM 2540D-2015	SEA	Florence	05/10/2023 18:15	05/12/2023 09:30	
FD01082-01	Total Phosphorus	SM 4500-P B,E-2011	FLY	Florence	05/10/2023 18:15	05/16/2023 12:06	
FD01082-01	Carbonaceous BOD	SM 5210 B-2016	SEA	Florence	05/10/2023 18:15	05/11/2023 14:40	05/16/2023 10:30

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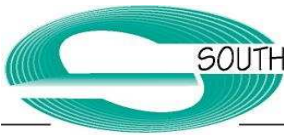
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COMPANY/CLIENT NAME ENERSOLV		CLIENT P.O. NUMBER		ENERSOLV PROJECT NUMBER ENE 13886 RMCWHORTER		REQUESTED ANALYSES																											
CLIENT POINT OF CONTACT R. McWhorter		CLIENT PHYSICAL ADDRESS 2220 Beltline Rd		CITY/STATE/ZIP Decatur, AL 35601																													
CLIENT EMAIL rmcwhorter@enersolv.com		PHONE NUMBER 256-566-9220		OTHER INFORMATION Tuscumbia Spring Creek																													
SAMPLE COLLECTED BY R. McWhorter		EXPEDITED REPORT DELIVERY (SURCHARGE)		DATE DUE (REQUIRED)																													
LAB NUMBER FD01082-01		SAMPLE DESCRIPTION Tuscumbia Spring Creek SC-2		SAMPLE TRANSFER/GRAB DATE 5/10/23		SAMPLE TRANSFER/GRAB TIME 1815		GRAB		COMP		ALK		CBOD		COND		DO		HARD		NH3		NO3NO2IC		P TOTAL		pH		TKN		TSS	
								X				X		X		X		X		X		X		X		X		X		X			



May 18, 2023

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
FD01083-01	Tuscumbia Spring Creek SC-3	05/10/2023	05/11/2023

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Margaret Aiken
Project Manager

Reviewed by:

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**SAMPLE RESULTS REPORT**

Report Date/Time: 05/18/2023 11:35

REPORT TO

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

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Analyte Name	Result	Units	Qualifier	Regulatory Limit
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Sample Point: Tuscumbia Spring Cree

Sample ID: FD01083-01

Collected: 05/10/2023

Submitted: 05/11/2023

Anions by IC

Nitrite-Nitrogen	0.270	mg/l		
Nitrate-Nitrogen	2.74	mg/l		
Nitrate plus Nitrite-Nitrogen	3.01	mg/l		

Inorganics

Total Alkalinity	167	mg/l CaCO ₃		
Carbonaceous BOD	2.47	mg/l		
Conductance	375.0	umho/cm		
Ammonia-Nitrogen	<0.100	mg/l		
Total Phosphorus	<0.100	mg/l		
Total Kjeldahl Nitrogen	1.12	mg/l		
Total Suspended Solids	6.10	mg/l		

Metals by ICP-OES

Total Calcium	68.1	mg/l		
Total Hardness	181	mg/l CaCO ₃		
Total Magnesium	2.58	mg/l		

On-Site Analysis

Dissolved Oxygen	6.00	mg/l		
pH	7.1	su		

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2919 Fairgrounds Road SW
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SAMPLE RESULTS REPORT
Report Date/Time: 05/18/2023 11:35

REPORT TO
Ricky McWhorter City of Tuscumbia 202 East 6th St Tuscumbia, AL 35674

This report may contain information that is confidential and/or proprietary. This information is intended for the addressee only and may not be copied or disseminated except in full without the written consent of Southern Environmental Testing.

All calculations are performed prior to rounding per EPA and *Standard Methods* requirements. Calibration data for field analyses conducted by SET or *ENERSOLV* personnel are available upon request.

Data Qualifiers

- M Sample matrix precluded reliable matrix spike/matrix spike duplicate recovery and/or precision. Non-homogeneity of sample or presence of interfering substances may result in spike recoveries outside acceptance limits.
- < Less than reporting limit

Analysis Information

Lab Number	Analysis	Referenced Method	Analyst	SET Facility	Collection Date/Time	Analysis Start Date/Time	Analysis End Date/Time (BOD, CBOD, Coliforms)
FD01083-01	Total Hardness	[CALC]	FLY	Florence	05/10/2023 18:30	05/12/2023 10:26	
FD01083-01	Calcium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	05/10/2023 18:30	05/12/2023 10:26	
FD01083-01	Magnesium	EPA 200.7 Rev. 4.4/6010C	FLY	Florence	05/10/2023 18:30	05/12/2023 10:26	
FD01083-01	Nitrate-Nitrogen	EPA 300.0, Rev 2.1	WCC	Florence	05/10/2023 18:30	05/11/2023 13:30	
FD01083-01	Nitrite-Nitrogen	EPA 300.0, Rev 2.1	WCC	Florence	05/10/2023 18:30	05/11/2023 13:30	
FD01083-01	Ammonia-Nitrogen	FIAlab 100	RAC	Decatur	05/10/2023 18:30	05/12/2023 08:45	
FD01083-01	Total Kjeldahl Nitrogen	FIAlab 100	RAC	Decatur	05/10/2023 18:30	05/12/2023 09:50	
FD01083-01	Total Alkalinity	SM 2320B-2011	JD	Florence	05/10/2023 18:30	05/12/2023 08:20	
FD01083-01	Conductance	SM 2510B-2011	DRK	Florence	05/10/2023 18:30	05/16/2023 13:30	
FD01083-01	Total Suspended Solids	SM 2540D-2015	SEA	Florence	05/10/2023 18:30	05/12/2023 09:30	
FD01083-01	Total Phosphorus	SM 4500-P B,E-2011	FLY	Florence	05/10/2023 18:30	05/16/2023 12:06	
FD01083-01	Carbonaceous BOD	SM 5210 B-2016	SEA	Florence	05/10/2023 18:30	05/11/2023 14:40	05/16/2023 10:30

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 (256) 350-0846

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COMPANY/CLIENT NAME ENERSOLV	CLIENT P.O. NUMBER ENE 13886 RMCWHORTER	REQUESTED ANALYSES
CLIENT POINT OF CONTACT R. McWhorter	CLIENT PHYSICAL ADDRESS 2220 Beltline Rd Decatur, AL 35601	
CLIENT EMAIL rmcwhorter@enersolv.com	PHONE NUMBER 256-566-9220	
SAMPLE COLLECTED BY R. McWhorter	OTHER INFORMATION Tuscumbia Spring Creek	
	EXPEDITED REPORT DELIVERY (SURCHARGE)	
	DATE DUE (REQUIRED)	

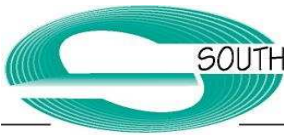
LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	ALK	CBOD	COND	DO	HARD	NH3	NO3NO2IC	P TOTAL	PH	TKN	TSS
FD01083-01	Tuscumbia Spring Creek SC-3	5/10/23	1830	X		X	X	X	X	X	X	X	X	X	X	X

Comments:
 FLOW _____
 Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE
 RECEIVED @ 2.7

SAMPLER INFORMATION	FIELD INFORMATION			Qty	Type	Parameters		
	Start Date	Time	Stop Date					
Start Date	7.1	5/10/23	1835	1	Poly 1/2 Cool 6c	Alk, CBOD, NO3NO2, TSS		
Stop Date	5/10/23	1835	1835	1	Poly Pint HNO3 Cool 6c	Hard		
Stop Time	Analyst	Analyst	Analyst					
SM 4500H+B	SM 4500-CI D	SM 4500-O G	SM 2550B	1	Poly Pint H2SO4 Cool 6c	NH3, P, TKN		
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME

Accepted with Exception



May 18, 2023

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Lab ID	Sample Description	Date Collected	Date Submitted
FD01084-01	Tuscumbia Spring Creek SC-4	05/10/2023	05/11/2023

This cover page and the attached chain-of-custody record(s) are integral parts of your report. Southern Environmental Testing considers this report your official record. This information shall remain in Southern Environmental Testing's active database for a period of one (1) calendar year before archiving. Any replacement of this information after archiving may result in an administrative fee to cover the cost of retrieval.

If you have any questions or would like more information regarding these analyses, please call our Decatur facility at (256) 280-2567 or our Florence facility at (256) 740-5532.

Margaret Aiken
Project Manager

Reviewed by:

3103 Northington Court
Florence, AL 35630
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SAMPLE RESULTS REPORT

Report Date/Time: 05/18/2023 11:38

REPORT TO

Ricky McWhorter
City of Tuscumbia
202 East 6th St
Tuscumbia, AL 35674

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Analyte Name	Result	Units	Qualifier	Regulatory Limit
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Sample Point: Tuscumbia Spring Cree

Sample ID: FD01084-01

Collected: 05/10/2023

Submitted: 05/11/2023

Anions by IC

Nitrite-Nitrogen	0.192	mg/l		
Nitrate-Nitrogen	2.43	mg/l		
Nitrate plus Nitrite-Nitrogen	2.62	mg/l		

Inorganics

Total Alkalinity	127	mg/l CaCO ₃		
Carbonaceous BOD	4.53	mg/l		
Conductance	296.0	umho/cm		
Ammonia-Nitrogen	0.219	mg/l		
Total Phosphorus	0.240	mg/l		
Total Kjeldahl Nitrogen	2.69	mg/l		
Total Suspended Solids	118	mg/l		

Metals by ICP-OES

Total Calcium	50.6	mg/l		
Total Hardness	140	mg/l CaCO ₃		
Total Magnesium	3.19	mg/l		

On-Site Analysis

Dissolved Oxygen	6.50	mg/l		
pH	7.2	su		

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LAB NUMBER	SAMPLE DESCRIPTION	SAMPLE TRANSFER/GRAB DATE	SAMPLE TRANSFER/GRAB TIME	GRAB	COMP	ALK	CBOD	COND	DO	HARD	NH3	NO3NO2IC	P TOTAL	pH	TKN	TSS
FD01084-01	Tuscumbia Spring Creek SC-4	5/10/23	1845	X		X	X	X	X	X	X	X	X	X	X	X

Comments:
 FLOW _____
 Collector to complete shaded areas, as applicable

SAMPLE TEMPERATURE
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SAMPLER INFORMATION	FIELD INFORMATION						Qty	Type	Parameters
	Start Date	Start Time	Stop Date	Stop Time	Analyst	Time			
	pH su	7.2	TRC mg/l		DO mg/l	6.5	Temp deg C		Alk, CBOD, NO3NO2, TSS
	Date	5/10/23	Date		Date	5/12/23	Date		Cond
	Time	1848	Time		Time	1848	Time		Hard
	Analyst	R	Analyst		Analyst	R	Analyst		
	SM 4500H+B		SM 4500-C1 D		SM 4500-O G		SM 2550B		
	RELINQUISHED BY: (SIGNATURE)	DATE	RELINQUISHED BY: (SIGNATURE)	DATE	RELINQUISHED BY: (SIGNATURE)	DATE	RELINQUISHED BY: (SIGNATURE)	DATE	NH3, P, TKN
	RECEIVED BY: (SIGNATURE)	DATE	RECEIVED BY: (SIGNATURE)	DATE	RECEIVED BY: (SIGNATURE)	DATE	RECEIVED BY: (SIGNATURE)	DATE	

RECEIVED FOR LABORATORY USE BY: (SIGNATURE) *Florisia Young* DATE: 5/11/23 TIME: 0700

SAMPLE STATUS: Accepted Rejected Accepted with Exception

Enersolv Form FLD-020-SOP A rev. 5