

Clean Water 2020 Program

CONSENT DECREE QUARTERLY REPORT

April 1, 2020 – June 30, 2020

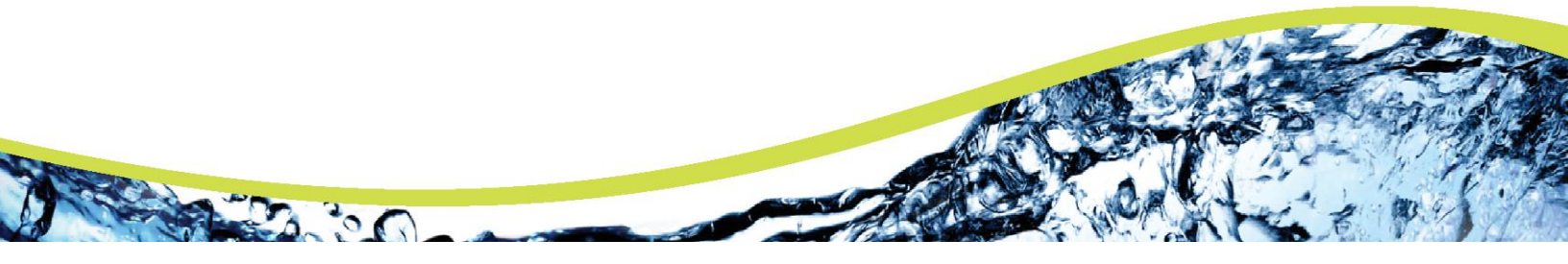


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Section 1 Introduction

1.1 Summary of Reporting Requirements

On May 21, 2014, the City of Columbia (City) entered into a Consent Decree (CD) with the United States Environmental Protection Agency (EPA), the United States Department of Justice (DOJ) and the South Carolina Department of Health and Environmental Control (SCDHEC). To fulfill the reporting requirements as defined in Section IX.39.a of the CD, the City has prepared this *Quarterly Report* that includes the following information (as excerpted from the CD):

1. A description of all projects and activities conducted during the most recently completed calendar quarter to comply with the requirements of this Consent Decree, in Gantt chart or similar format. This description shall include completion percentages of early action capital improvement projects under Paragraph 10, continuing sewer assessments under the CSAP, and the subsequent remedial actions under the IR Report;
2. The date, time, location, source, duration, estimated volume, receiving water (if any), cause, and actions taken to repair or otherwise resolve the cause of all SSOs for the most recently completed quarter in a tabulated electronic format;
3. The anticipated projects and activities that will be performed in the next quarter to comply with the requirements of this Consent Decree, in Gantt chart or similar format;
4. Any additional information that demonstrates that Columbia is implementing the remedial measures required in this Consent Decree; and
5. The results of water quality monitoring conducted during the previous Calendar Quarter as part of the SEP described in Appendix I of the Consent Decree.

1.2 Report Organization

This Quarterly Report is organized as follows:

Section 1 – Introduction

This section includes a summary of the reporting requirements and describes the report organization.

Section 2 – Schedule of Projects and Activities

This section addresses the requirements of Sections IX.39.a.(i) and IX.39.a.(iii) of the Consent Decree. The section includes the projects and activities conducted during the most recently completed calendar

quarter to comply with the requirements of the CD as well as the anticipated projects and activities that will be performed in the next quarter to comply with the requirements of the CD. A Gantt chart schedule of these activities is provided and includes completion percentages of continuing sewer assessments under the CSAP and the subsequent remedial actions under the IR Report, as applicable.

Section 3 – Additional Information Demonstrating Implementation of Consent Decree Requirements

This section addresses the requirements of Section IX.39.a.(iv) of the Consent Decree and includes additional information that demonstrates that Columbia is implementing the remedial measures required in the CD. Information supplemental to that which is provided in Section 2 is provided in this section.

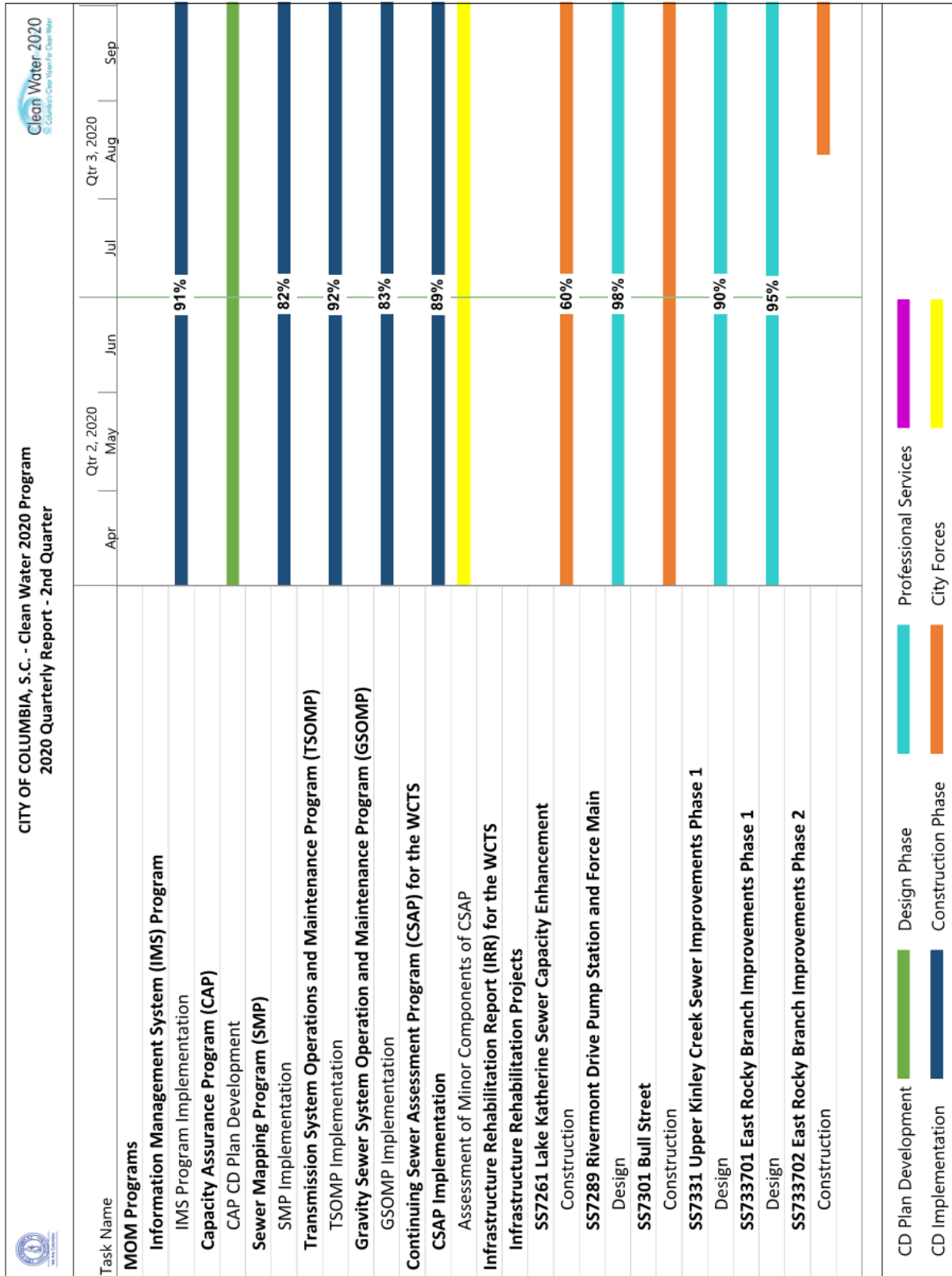
Section 4 – Quarterly SSO Report

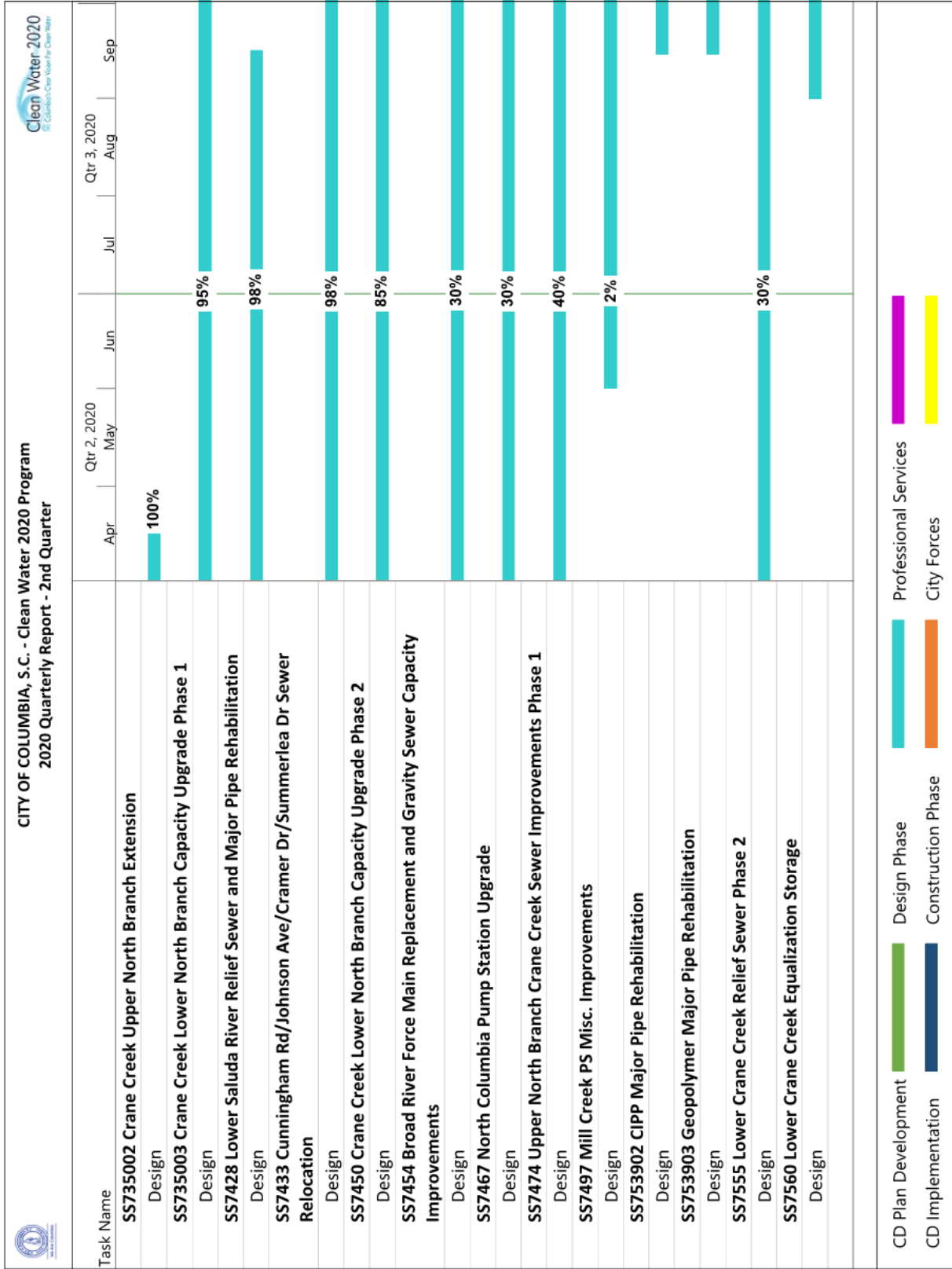
This section addresses the requirements of Section IX.39.a.(ii) of the Consent Decree and provides a tabular listing of sanitary sewer overflows (SSOs). The table includes the date, time, location, source, duration, estimated volume, receiving water (if any), cause, and actions taken to repair or otherwise resolve the cause of all SSOs that occurred during the most recently completed calendar quarter.

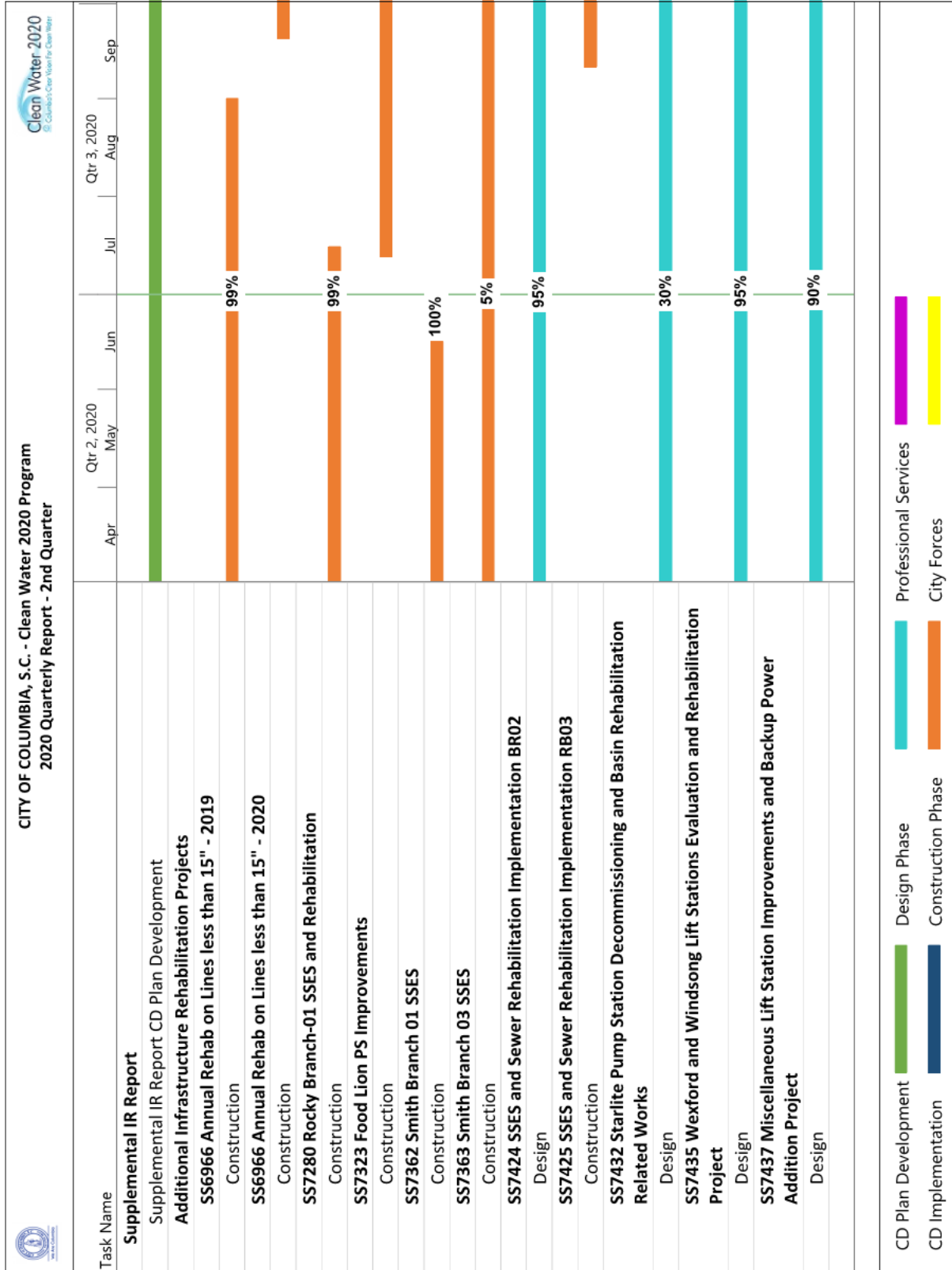
Section 5 – SEP Water Quality Monitoring Results

This section addresses the requirements of Section IX.39.a.(v) of the Consent Decree and provides the results of water quality monitoring conducted during the previous Calendar Quarter as part of the SEP described in Appendix I of the CD.







Section 2 Schedule of Projects and Activities















CITY OF COLUMBIA, S.C. - Clean Water 2020 Program 2020 Quarterly Report - 2nd Quarter		Clean Water 2020 Columbia's Clear Vision For Clean Water					
Task Name		Apr	May	Jun	Jul	Aug	Sep
SS7462 Investigation of Crockett Road, Atlas Road and Versch Lock Lift Stations	Design			30%			
SS7463 SSES and Sewer Rehabilitation Implementation CC01	Design			27%			
SS7464 SSES and Sewer Rehabilitation Implementation CC02 and CC04	Design			90%			
SS7468 Three Rivers Force Main Replacement	Design			50%			
SS7478 RB01 SSES - Phase 2	Design			80%			
SS7479 SB02 SSES - Phase 2	Design			30%			
SS7487 Hickory Ridge Drive Sewer Rehab	Design			75%			
SS7535 Olympia Sewer Relocation and Rehabilitation	Design						
SS7546 Mallard Pointe Force Main	Design						
SS7547 Yacht Cove Force Main	Design						
SS7548 Shady Lane Force Main	Design						
SS7549 Woodlands Force Main	Design						
SS7554 Harbison #4 Pump Station Improvements and Force Main Replacement	Design						

CD Plan Development		Design Phase		Professional Services	
CD Implementation		Construction Phase		City Forces	

 CITY OF COLUMBIA, S.C. - Clean Water 2020 Program 2020 Quarterly Report - 2nd Quarter						
Task Name	Apr	May	Jun	Jul	Aug	Sep
Sewer System Hydraulic Model Model Report Development						

	Design Phase		Professional Services
	CD Implementation		Construction Phase
			City Forces

Section 3 Additional Information Demonstrating Implementation of Consent Decree Requirements

In accordance with Section IX.39.a.(iv) of the CD, the following section provides additional information that demonstrates that the City is implementing the remedial measures required in the CD.

The City notified the U.S. Department of Justice, the U.S. Environmental Protection Agency, and the South Carolina Department of Health and Environmental Control of a *force majeure* event starting on March 13, 2020. On this date, the Governor of South Carolina declared a state of emergency based on a determination that COVID-19 posed an imminent public health emergency for the State, and on March 17, 2020 the Mayor and City Council declared a local state of emergency in the City. On April 7, 2020, the City submitted a written *force majeure* notice and requested to provide additional information required under Paragraph 56 of the Consent Decree once the COVID-19 pandemic is contained and the City is better able to fully assess the impacts on its performance of its Consent Decree obligations. The force majeure event notice is provided in Appendix A.

3.1 MOM Programs

In accordance with Section V.12 of the CD, the City is developing and implementing specific Management, Operations, and Maintenance (MOM) programs. The Program elements addressed in this section provide information regarding activities involving the Metro WWTP as well as the City's Wastewater Collection and Transmission System (WCTS).

3.1.1 Information Management System (IMS) Program

The IMS Program was submitted to EPA and SCDHEC on January 4, 2016. The City received final approval of the IMS Program from EPA and SCDHEC on May 23, 2016.

The activities completed or in progress during the current reporting period are as follows:

- Sewer Mapping Program – 82% Complete

3.1.2 Sewer Mapping Program

In accordance with the requirements of the CD, the City was to develop and submit a Sewer Mapping Program (SMP) to EPA and SCDHEC within 60 days of the date of entry of the CD. The City received final approval of the SMP from EPA and SCDHEC on December 9, 2014.

Projects and significant activities completed during the current reporting period:

- The City continues to complete the electronic mapping of each Sewer Basin in accordance with the approved SMP implementation plan. Progress for each WCTS Minor Gravity Mapping basin is as follows:
 - West Columbia Basin – 100% complete

- Smith Branch Basin – 89% complete
- Saluda River Basin – 92% complete
- Rocky Branch Basin – 80% complete
- Mill Creek Basin – 28% complete
- Gills Creek Basin – 39% complete
- Crane Creek Basin – 71% complete
- Broad River Basin – 46% complete

3.1.3 Transmission System Operations and Maintenance Program (TSOMP)

The TSOMP was submitted to EPA and SCDHEC on May 18, 2015. The City received final approval of the TSOMP from EPA and SCDHEC on September 2, 2016.

The activities completed or in progress during the current reporting period are as follows:

- Force Main and Easement Maintenance (Easement survey and marking and initial clearing to the surveyed limits, where practical) – 75% Complete

3.1.4 Gravity Sewer System Operation and Maintenance Program (GSOMP)

The GSOMP was submitted to EPA and SCDHEC on November 20, 2015. The City received final approval of the GSOMP from EPA and SCDHEC on May 23, 2016. The GSOMP was revised and resubmitted to EPA and SCDHEC on May 8, 2019.

The activities completed or in progress during the current reporting period are as follows:

- Gravity Sewer Easement survey and marking and initial clearing to survey the limits, where practical – 50% Complete

3.2 Continuing Sewer Assessment Program (CSAP) for the WCTS

The CSAP was submitted to EPA and SCDHEC on June 9, 2015. The City received final approval of the CSAP from EPA and SCDHEC on May 23, 2016. The CSAP was revised and resubmitted to EPA and SCDHEC on October 3, 2018. The City received approval of the revised CSAP from EPA and SCDHEC on February 6, 2019.

The activities under the Minor Components of the CSAP completed or in progress during the current reporting period are as follows:

- Minor Gravity Sewer and Manholes Condition Assessment – 68% Complete

- Minor Pump Stations Condition Assessment – 68% Complete
- Minor Force Mains Field Assessment – 68% Complete

3.3 Infrastructure Rehabilitation Report (IRR) for the WCTS

In accordance with Section V.16 of the CD, the City shall submit an Infrastructure Rehabilitation Report (IRR) summarizing the results of the CSAP of the major components of the WCTS and a description of proposed rehabilitation projects. The IRR was submitted to EPA and SCDHEC on November 22, 2019. The City is awaiting EPA and SCDHEC review and approval of the IRR.

As rehabilitation projects are identified through the assessments described in Section 3.2 and in the normal course of operations and maintenance, the City is proceeding with design and construction of those projects. Completion percentages of projects currently in progress are as follows:

- SS7261 Lake Katherine Sewer Capacity Enhancement – Construction 60% Complete
- SS7289 Rivermont Drive Pump Station and Force Main – Design 98% Complete
- SS7301 Bull Street – Construction in Progress; a completion percentage cannot be provided due to a varying scope of work and timeline for this project.
- SS7330 Upper Mill Creek Sewer Improvements – Project has been postponed due to further assessment of available flow data. Upon further analysis it was determined the project is no longer needed from a capacity standpoint. The rehabilitation of other existing sewer assets within the limits of this project will be completed as part of a separate project.
- SS7331 Upper Kinley Creek Sewer Improvements Phase 1 – Design 90% Complete
- SS733701 East Rocky Branch Improvements Phase 1 – Design 95% Complete
- SS733702 East Rocky Branch Improvements Phase 2 – Construction 0% Complete
- SS735002 Crane Creek Upper North Branch Extension – Design 100% Complete
- SS735003 Crane Creek Lower North Branch Capacity Upgrade Phase 1 – Design 95% Complete
- SS7428 Lower Saluda River Relief Sewer and Major Pipe Rehabilitation – Design 98% Complete
- SS7433 Cunningham Rd/Johnson Ave/Cramer Dr/Summerlea Dr Sewer Relocation – Design 98% Complete
- SS7450 Crane Creek Lower North Branch Capacity Upgrade Phase 2 – Design 85% Complete
- SS7454 Broad River Force Main Replacement and Gravity Sewer Capacity Improvements – Design 30% Complete
- SS7466 Lower Rocky Branch Relief Sewer Phase 1 – Project has been postponed due to further assessment of available flow data. Upon further analysis it was determined the project is no longer needed from a capacity standpoint. The rehabilitation of other existing sewer assets within the limits of this project will be completed as part of a separate project.
- SS7467 North Columbia Pump Station Upgrade – Design 30% Complete
- SS7470 Lower Crane Creek Relief Sewer Phase 1 – Project has been postponed due to further assessment of available flow data. Upon further analysis it was determined the project is no longer needed from a capacity standpoint. The rehabilitation of other existing sewer assets within the limits of this project will be completed as part of a separate project.

- SS7474 Upper North Branch Crane Creek Sewer Improvements Phase 1 – Design 40% Complete
- SS7497 Mill Creek Pump Station Miscellaneous Improvements – 2% Design Complete
- SS753902 CIPP Major Pipe Rehabilitation – 0% Design Complete
- SS753903 Geopolymer Major Pipe Rehabilitation – 0% Design Complete
- SS7555 Lower Crane Creek Relief Sewer Phase 2 – Design 30% Complete
- SS7560 Lower Crane Creek Equalization Storage – 0% Design Complete

In accordance with Section V.16.c of the CD, the City shall submit a Supplemental Infrastructure Rehabilitation Report (SIRR) which shall update all portions of the IRR to reflect additional information developed by the City through completion of the CSAP of the minor components of the WCTS. The SIRR is to be submitted within six months after the City has assessed the remainder of the entire WCTS pursuant to the CSAP. As rehabilitation projects are identified through the assessments described in Section 3.2 and in the normal course of operations and maintenance, the City is proceeding with design and construction of those projects. Completion percentages of projects currently in progress are as follows:

- SS6966 Annual Rehab on Lines less than 15" – 2019 Construction 99% Complete, 2020 Construction 0% Complete
- SS7280 Rocky Branch-01 SSES and Rehabilitation – Construction 99% Complete
- SS7323 Food Lion PS Improvements – Construction 0% Complete
- SS7362 Smith Branch 01 SSES – Construction 100% Complete
- SS7363 Smith Branch 03 SSES – Construction 5% Complete
- SS7424 SSES and Sewer Rehabilitation Implementation BR02 – Design 95% Complete
- SS7425 SSES and Sewer Rehabilitation Implementation RB03 – Construction 0% Complete
- SS7432 Starlite PS Decommissioning and Basin Rehabilitation Related Works – Design 30% Complete
- SS7435 Wexford and Windsong Lift Stations Evaluation and Rehabilitation Project – Design 95% Complete
- SS7437 Miscellaneous Lift Station Improvements and Backup Power Addition Project – Design 90% Complete
- SS7462 Investigation of Crockett Road, Atlas Road and Versch Lock Lift Stations – Design 30% Complete
- SS7463 SSES and Sewer Rehabilitation Implementation CC01 – Design 27% Complete
- SS7464 SSES and Sewer Rehabilitation Implementation CC02 and CC04 – Design 90% Complete
- SS7468 Three Rivers Force Main Replacement – Design 50% Complete
- SS7478 Rocky Branch 01 SSES Phase 2 – Design 80% Complete
- SS7479 Smith Branch 02 SSES Phase 2 – Design 30% Complete
- SS7487 Hickory Ridge Drive Sewer Rehab – Design 75% Complete
- SS7535 Olympia Sanitary Sewer Relocation and Rehabilitation – 0% Design Complete
- SS7546 Mallard Pointe Force Main – 0% Design Complete
- SS7547 Yacht Cove Force Main – 0% Design Complete
- SS7548 Shady Lane Force Main – 0% Design Complete

- SS7549 Woodlands Force Main – 0% Design Complete
- SS7554 Harbison #4 Pump Station Improvements and Force Main Replacement – Design 0% Complete

3.4 Sewer System Hydraulic Model

In accordance with Section V.17.d of the CD, the City is to submit to EPA and SCDHEC for review, comment, and approval a Hydraulic Model Report that explains how the Model meets the capabilities required in Section V.17.a. The Hydraulic Model Report is to be submitted within fifteen months after completion of the CSAP for Major components of the WCTS. As of May 23, 2019, all activities under the Major components of the CSAP were completed. Therefore, the deadline for submittal of the Hydraulic Model Report to EPA and SCDHEC is August 23, 2020.

Section 4 Quarterly SSO Report

In accordance with Section IX.39.a.(ii) of the CD, the City is to provide a list of all SSOs that occurred during the reporting period in a tabular format along with information on the date, time, location, source, duration, estimated volume, receiving water, cause, and actions taken to resolve the SSO.

Table 1 - SSO Report, 2nd Quarter 2020

City of Columbia, SC Quarterly SSO Listing 2nd Quarter 2020									
Date	Time	Location	Source	Date of Corrective Action	Time of Corrective Action	Estimated Volume (gallons)	Receiving Water (if any)	Cause	Actions Taken
4/1/2020	13:30	2050 Watermark Pl, Columbia, Sc 29210	Manhole	TBD		180	Storm Drain	Roots	Removed Stoppage To Resume Normal Flow. Tap Renewal.
4/2/2020	12:22	109 Old Oak Dr, Columbia, Sc 29203	Manhole	TBD		17562	Trib To Crane Creek	Roots	Removed Blockage To Resume Normal Flow. Main Line Repair.
4/3/2020	12:50	3209 Bush River Rd, Columbia, Sc 29210	Manhole	43927	07:29	480	Unnamed Creek	Debris	Removed Blockage To Resume Normal Flow. Manhole Cleaning/Repair.
4/4/2020	22:30	412 Shagbark Ave, Columbia, Sc 29209	Manhole	43926	23:30	1500	Storm Drain	Collapsed Line	Removed Blockage To Resume Normal Flow. Washed Main Line To Remove Blockage.
4/6/2020	20:30	1808 Woodvalley Dr, Columbia, Sc 29212	Manhole	4/6/2020	22:30	1412	Storm Drain	Debris	Removed Stoppage To Resume Normal Flow. Washed Main Line To Remove Stoppage.
4/11/2020	13:15	3219 Montcrest Rd, Columbia, Sc 29210	Manhole	TBD		11787	Trib To Saluda River	Collapsed Line	Removed Blockage To Resume Normal Flow. Manhole Repair.
4/13/2020	21:25	2261 N Lake Dr, Columbia, Sc 29212	Manhole	4/13/2020	21:45	125		Grease	Removed Blockage To Resume Normal Flow. Washed Main Line 300 Feet To Remove Blockage.
4/13/2020	13:51	7581 Irmo Dr, Columbia, Sc 29212	Pump Station	N/A		10	Storm Drain	3rd Party Responsibility	Lost Power From Utility At The Station. Hooked Up Portable Generator To Get The Pumps Started. Power Restored By Utility.
4/15/2020	17:30	202 Summerlea Dr, Columbia, Sc 29203	Cleanout	4/20/2020	09:00	210	Trib To Smith Branch	3rd Party Responsibility	Attempted To Remove Blockage. Tap Not Cut Out After Main Line Was Lined. Tap Renewal To Cut Out Tap And Restore Service.
4/16/2020	12:20	1234 Universal Dr, Columbia, Sc 29209	Manhole	4/16/2020	13:30	420	Storm Drain	Grease	Removed Blockage To Resume Normal Flow. Washed Main Line 200 Feet To Remove Blockage.
4/25/2020	18:00	5830 Mcmillan Cir, Columbia, Sc 29212	Cleanout	4/25/2020	16:15	16		Collapsed Line	Removed Stoppage To Resume Normal Flow. Service Line Repair.
4/28/2020	17:50	28 Heritage Hills Ct, Columbia, Sc 29203	Manhole	4/28/2020	19:00	1168	Trib To Crane Creek	Debris	Removed Blockage To Resume Normal Flow. Washed Manhole To Clear Debris And Washed Main Line 100 Feet.
4/28/2020	11:30	107 Townes Rd, Columbia, Sc 29210	Manhole	4/28/2020	12:10	240		Debris	Removed Blockage To Resume Normal Flow. Washed Main Line 200 Feet To Remove Blockage.
4/30/2020	17:05	109 Woodvale Cir, Columbia, Sc 29203	Cleanout	4/30/2020	17:10	30		Roots	Removed Stoppage To Resume Normal Flow. Root Cut Service Line.
5/2/2020	20:00	101 Shagbark Ave, Columbia, Sc 20209	Cleanout	TBD		12		Roots	Removed Stoppage To Resume Normal Flow. Service Line Repair.
5/6/2020	23:20	13 Club House Ct, Columbia, Sc 29203	Manhole	5/8/2020	09:00	18500	Trib To Crane Creek	Roots	Set Up Bypass Pump. Manhole Clean / Main Line Repair.
5/12/2020	14:32	7648 Garners Ferry Rd, Columbia, Sc 29209	Manhole	5/12/2020	15:40	5168	Trib To Reeder Point	Debris	Removed Blockage To Resume Normal Flow. Washed Service Line To Remove Inflow Protector From M/H.
5/12/2020	17:20	7648 Garners Ferry Rd, Columbia, Sc 29209	Manhole	N/A		81		Debris	Blockage Resolved Itself Without WWM Staff Intervention.
5/11/2020	10:30	3621 Baywater Dr, Columbia, Sc 29209	Cleanout	5/11/2020	10:30	60		Grease	Removed Blockage To Resume Normal Flow. Washed Service Line To Resume Normal Flow.
5/12/2020	19:00	106 Saddlefield Rd, Columbia, Sc 29203	Cleanout	TBD		9		Collapsed Line	Removed Blockage To Resume Normal Flow. Service Line Repair.

City of Columbia, SC Quarterly SSO Listing 2nd Quarter 2020									
Date	Time	Location	Source	Date of Corrective Action	Time of Corrective Action	Estimated Volume (gallons)	Receiving Water (if any)	Cause	Actions Taken
5/14/2020	08:00	3005 Glenwood Pl, Columbia, Sc 29204	Manhole	TBD		1218	Storm Drain	Roots	Removed Stoppage To Resume Normal Flow. Main Line Root Cut And Tap Renewal.
5/17/2020	22:05	220 Bryton Trce, Columbia, Sc 29210	Manhole	5/17/2020	23:48	1285	Unnamed Trib To Broad River	Debris	Removed Stoppage To Resume Normal Flow. Washed Main Line.
5/18/2020	18:00	141 Parkway Cir, Columbia, Sc 29203	Cleanout	5/18/2020	18:07	15		Collapsed Line	Removed Stoppage To Resume Normal Flow. Main Line Repair.
5/19/2020	08:45	4215 Colonial Dr, Columbia, Sc 29203	Cleanout	5/19/2020	08:45	1800	Smith Branch	Debris	Removed Stoppage To Resume Normal Flow. Washed Service Line Into Main Line To Remove Blockage.
5/20/2020	12:30	426 Veterans Rd, Columbia, Sc 29209	Cleanout	5/20/2020	12:30	20		Debris	Removed Blockage To Resume Normal Flow. Washed Service Line 20 Feet To Remove Blockage.
5/20/2020	16:30	4716 Devine St, Columbia, Sc 29209	Other	5/20/2020	16:50	2900	Gills Creek	3rd Party Responsibility	Repaired Temporary By-Pass.
5/22/2020	13:00	1810 Mitchell St, Columbia, Sc 29205	Cleanout	5/22/2020	13:00	5		Roots	Removed Blockage To Resume Normal Flow. Washed Service Line To Remove Roots.
5/23/2020	08:55	4215 Colonial Dr, Columbia, Sc 29203	Cleanout	5/23/2020	10:00	1200	Storm Drain	Debris	Removed Stoppage To Resume Normal Flow. Washed Main Line.
5/23/2020	11:30	1621 Stevenson Ave, Columbia, Sc 29203	Cleanout	N/A		63	Storm Drain	Wet Weather	Wet Weather; Observation Only.
5/24/2020	16:06	820 Easter St, Columbia, Sc 29203	Cleanout	TBD		8	Storm Drain	Collapsed Line	Removed Stoppage To Resume Normal Flow. Service Line Repair.
5/23/2020	02:00	7581 Irmo Dr, Columbia, Sc 29212	Pump Station	5/23/2020	10:30	3375	Storm Drain	3rd Party Responsibility	Lost Power From Utility Company At The Station. Hooked Up Portable Generator To Get The Pumps Started. Permanently Installed A Portable Generator On Site.
5/31/2020	19:40	1004 Craven St, Columbia, Sc 29203	Manhole	5/31/2020	22:30	3300	Storm Drain	Debris	Removed Blockage To Resume Normal Flow. Washed Main Line To Remove Blockage.
5/30/2020	07:00	1200 Simmon Tree Ln, Columbia, Sc 29201	Other	5/30/2020	07:00	5000	Stormwater Ditch	Equipment Failure	Evidence Only. Put Grit Chamber #2 Into Service.
6/4/2020	08:18	1537 Fork Ave, Columbia, Sc 29063	Manhole	TBD		2982	Trib To Koon Branch	Roots	Removed Blockage To Resume Normal Flow. Main Line Repair
6/4/2020	12:30	3414 N Main St, Columbia, Sc 29203	Cleanout	TBD		60	Storm Drain	Collapsed Line	Removed Blockage To Resume Normal Flow. Service Line Repair.
6/10/2020	10:29	5501 Broad River Rd, Columbia, Sc 29212	Manhole	6/10/2020	10:45	1200	Stoop Creek	Debris	Removed Stoppage To Resume Normal Flow. Washed Main Line.
6/16/2020	18:01	1421 Brookview Rd, Columbia, Sc 29212	Cleanout	TBD		13		Roots	Removed Stoppage To Resume Normal Flow. Service Line Repair.
6/20/2020	16:06	213 Gustly Ln, Hopkins, Sc 29061	Cleanout	TBD		600		Roots	Removed Stoppage To Resume Normal Flow. Main Line Repair.
6/22/2020	11:45	854 Galway Ln, Columbia, Sc 29209	Manhole	TBD		225	Unnamed Creek	Roots	Removed Stoppage To Resume Normal Flow. Main Line Repair.
6/25/2020	15:49	5709 Ames Rd, Columbia, Sc 29203	Manhole	6/25/2020	16:30	1801	Storm Drain	Grease	Removed Blockage To Resume Normal Flow. Washed Main Line 260 Feet To Remove Blockage.
6/25/2020	20:40	400 Winstaire Dr, Columbia, Sc 29210	Manhole	TBD		66	Storm Drain	Collapsed Line	Removed Blockage To Resume Normal Flow. Main Line Repair.

As noted in Section IV.8.a of the CD, a Building Backup is defined as a release of wastewater into a building or onto private property that is caused by blockages, flow conditions, or other malfunctions in the WCTS.

Separate from the SSO listing provided in Table 1 above, the following table identifies building backups within the City’s system for the current reporting period.

Table 2 – Building Backup Report, 2nd Quarter 2020

City of Columbia, SC Quarterly Building Backup Listing 2nd Quarter 2020									
Date	Time	Location	Source	Date of Corrective Action	Time of Corrective Action	Estimated Volume (gallons)	Receiving Water (if any)	Cause	Actions Taken
5/29/2020	21:48	912 Lady St, Columbia, Sc 29201	City	6/11/2020	14:00	10		3rd Party Responsibility	Spill Stopped When Submersible Sump Pump Turned Off. Main Line Repair.
6/9/2020	23:19	912 Lady St, Columbia, Sc 29201	City	6/11/2020	14:00	10		3rd Party Responsibility	Spill Stopped When Submersible Sump Pump Turned Off. Main Line Repair.
6/11/2020	10:05	912 Lady St, Columbia, Sc 29201	City	6/11/2020	14:00	10		3rd Party Responsibility	Main Line Repair.

Section 5 SEP Water Quality Monitoring Results

In accordance with Section IX.39.a.(v) of the CD, the following section provides a summary of the results of water quality monitoring conducted during the previous calendar quarter as part of the Supplemental Environmental Project (SEP) described in Appendix I of the CD.

5.1 Sampling Conducted and Results

As a part of the SEP requirements established in Section VIII and Appendix I of the CD, the City is to conduct water quality monitoring at three locations to assist in evaluation of the environmental benefits of the SEP in improving water quality in Smith Branch and Gills Creek. The City is to implement a program for ambient monitoring of dissolved oxygen (DO), total suspended solids (TSS), temperature, and E. coli at the following monitoring sites:

- Gills Creek at Garner's Ferry Road
- Smith Branch at North Main Street
- Gills Creek at Bluff Road

In accordance with the requirements of the CD, the City was to submit a Quality Assurance Project Plan (QAPP) to SCDHEC within 60 days of the date of entry of the CD. The City originally submitted the QAPP to SCDHEC on July 18, 2014 in advance of the deliverable deadline. The City subsequently received comments from SCDHEC and resubmitted the QAPP to SCDHEC on January 13, 2015. The City received final approval of the QAPP from EPA and SCDHEC on January 15, 2016. The QAPP was revised and resubmitted to SCDHEC on May 31, 2017 and on December 19, 2018 to reflect changes in City personnel. The revised QAPP was approved on January 9, 2019. The QAPP was subsequently revised and resubmitted to SCDHEC on January 22, 2019 to reflect a change in the testing laboratory. Following comments from SCDHEC and additional resubmittals, the City received approval of the revised QAPP from EPA and SCDHEC on April 2, 2019.

The City monitored quarterly for the first three years under the CD (through January 15, 2019) and will monitor monthly (or every other month at the Gills Creek at Bluff Road site) from years four through six under the CD.

Water quality monitoring for 2020 Q2 was completed on April 29, 2020, May 26, 2020, and June 24, 2020. Monitoring results are provided below for the following samples:

- C-001: Gills Creek at Garner's Ferry Road
- B-280: Smith Branch at North Main Street
- C-017: Gills Creek at Bluff Road

City of Columbia Quality Assurance Project Plan (QAPP) Data

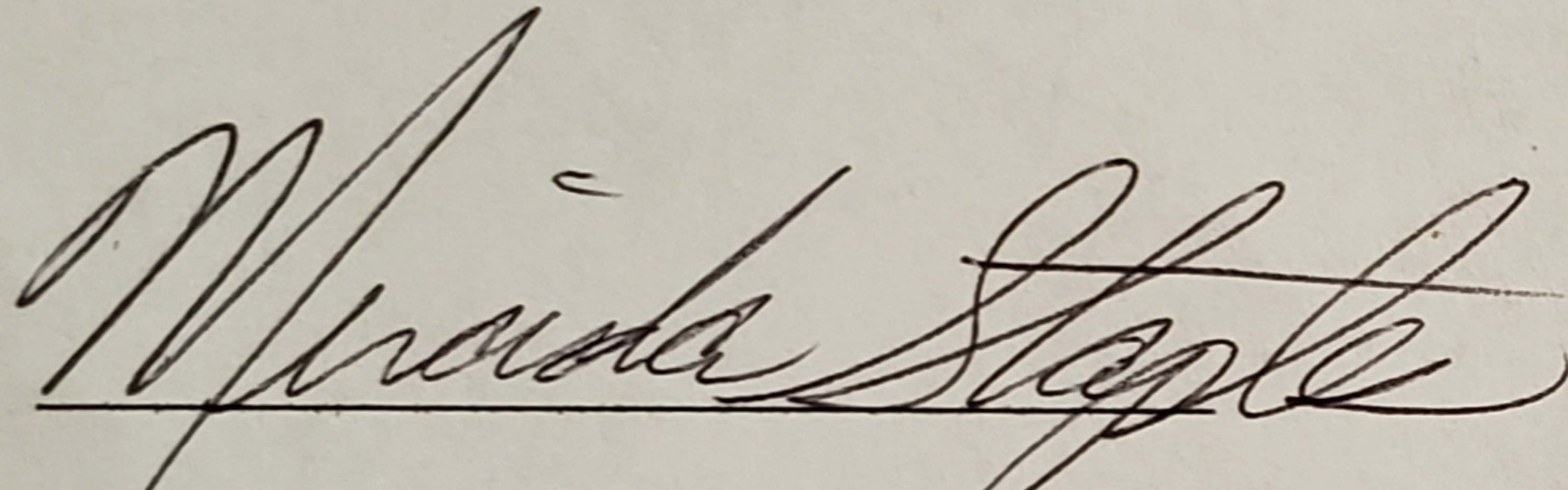
Verification and Validation Form

City of Columbia Supplemental Environmental Projects QAPP

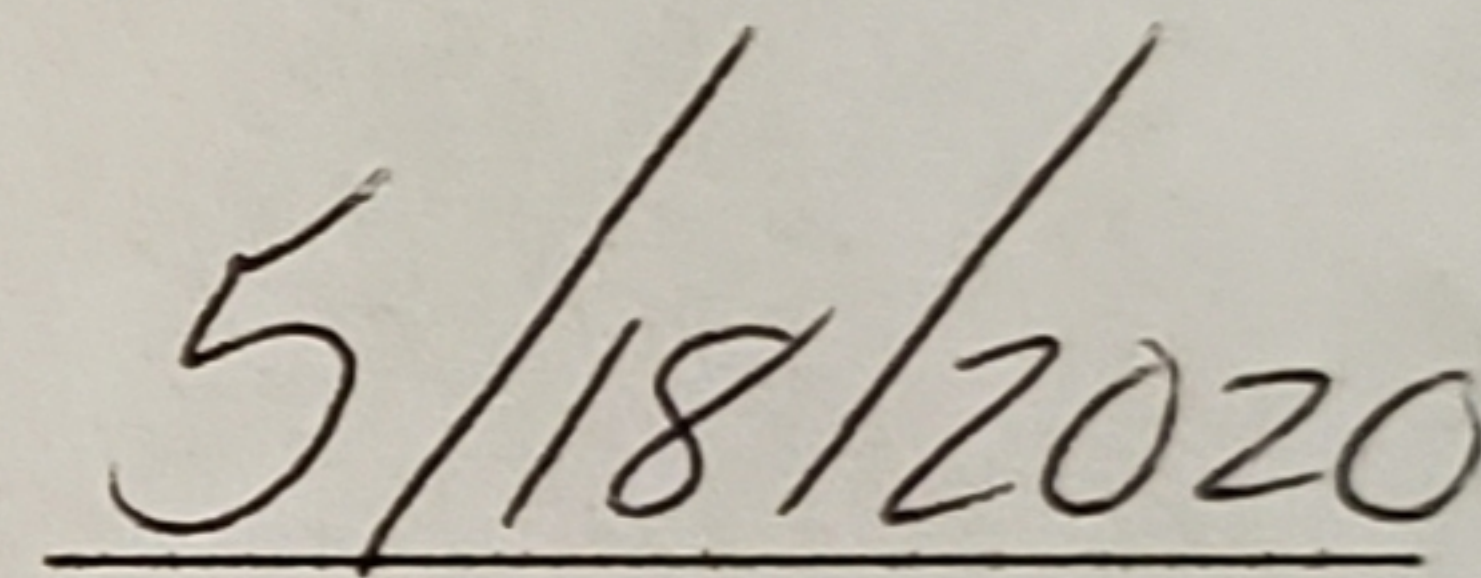
November 2015, Revised May 2017, Revised December 2018, Revised January 2019

Laboratory Report Date: 4/29/2020

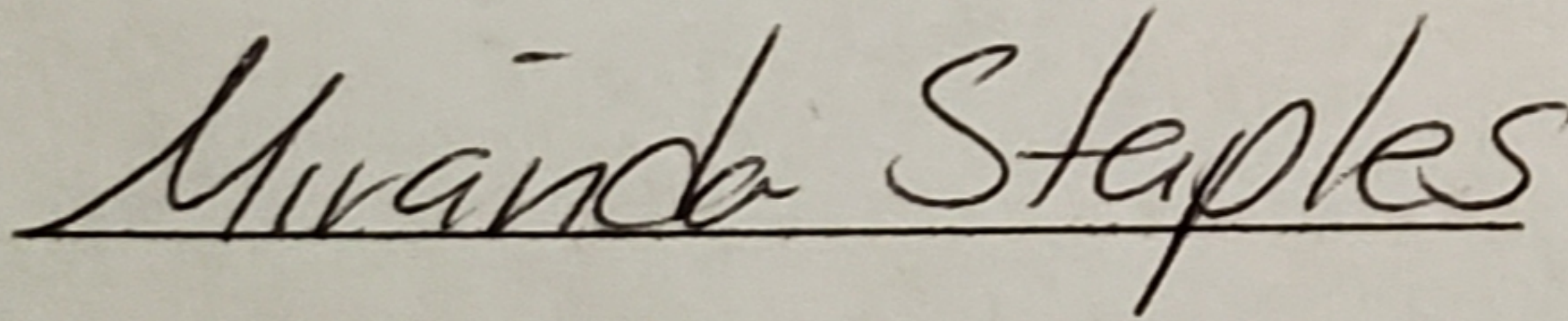
The undersigned verifies the data in the above referenced report, per the QAPP requirements.



Project Verifier/QA Manager

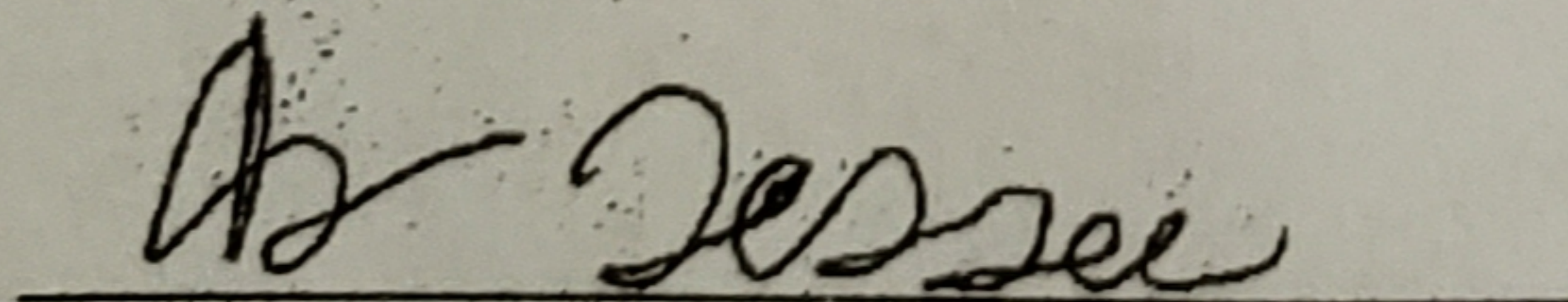


Date

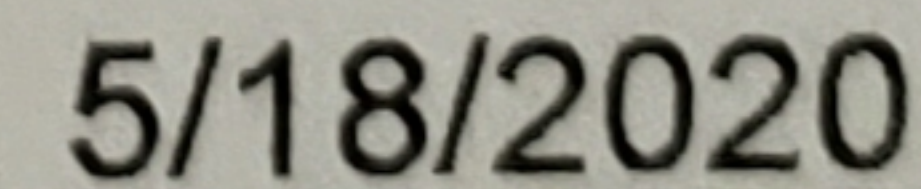


Printed Name

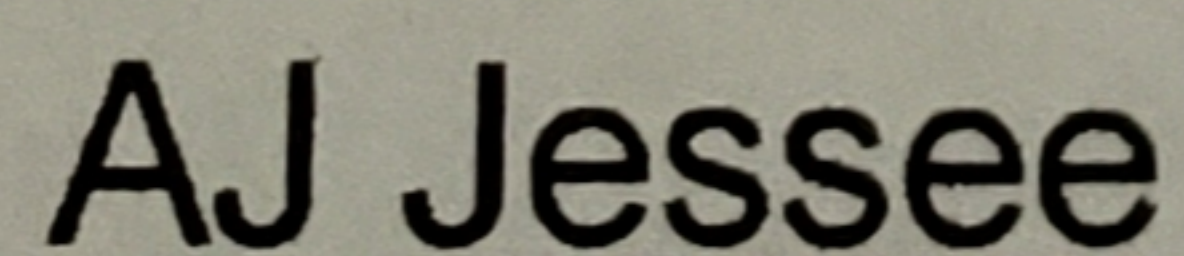
The undersigned validates the data in the above referenced report, per the QAPP requirements.



Project Manager/Project Validator



Date



Printed Name



Laboratory Report

Client	Woolpert Inc. - City of Columbia Michael Long 2000 Center Point Road Ste 2200 Columbia, SC 29210	Project:	Water Quality Testing
		Work Order:	0040979
		Received:	04/20/2020 11:55

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on April 20, 2020. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Lauren Hollister, your Project Manager, at lhollister@rcenviro.com, (864)-232-1556 if you have any questions about this report.

CC: Trevor Gauron

Report Approved By:

Lauren Hollister
Project Manager



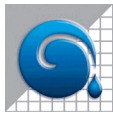
*South Carolina Greenville Laboratory Identification 23105
South Carolina Columbia Laboratory Identification 40572
North Carolina Laboratory Certification Number 27
North Carolina Drinking Water Lab Number 45710
NELAP Utah Certificate Number SC000042014-1
Georgia Drinking Water Lab ID 880*

Certificate of Analysis

Client Woolpert Inc. - City of Columbia
Michael Long
2000 Center Point Road Ste 2200
Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0040979
Received: 04/20/2020 11:55

Sample Number	Sample Description	Matrix	Sampled	Type
0040979-01	DHEC B-280 Smith Branch @ N. Main St	Wastewater	04/20/20 09:10	Grab
0040979-02	DHEC B-280 Smith Branch @ N. Main St	Wastewater	04/20/20 09:05	Grab
0040979-03	DHEC B-280 Smith Branch @ N. Main St	Wastewater	04/20/20 09:07	Grab
0040979-04	DHEC C-001 Gills Creek @ Garners Ferry Rd	Wastewater	04/20/20 09:45	Grab
0040979-05	DHEC C-001 Gills Creek @ Garners Ferry Rd	Wastewater	04/20/20 09:40	Grab
0040979-06	DHEC C-001 Gills Creek @ Garners Ferry Rd	Wastewater	04/20/20 09:42	Grab
0040979-07	DHEC C-017 Gills Creek @ Bluff Road	Wastewater	04/20/20 10:32	Grab
0040979-08	DHEC C-017 Gills Creek @ Bluff Road	Wastewater	04/20/20 10:25	Grab
0040979-09	DHEC C-017 Gills Creek @ Bluff Road	Wastewater	04/20/20 10:30	Grab



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0040979
Reported: 04/29/20 11:26

Sample Data

Sample Number 0040979-01
Sample Description DHEC B-280 Smith Branch @ N. Main St collected on 04/20/20 09:10

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	8.0	0.1	mg/L	1.00	04/20/20 09:10	SM 4500 OG-2011		CDT	B0D0924	RC-C
Grab	Complete				04/20/20 09:10	Grab		CDT	B0D0924	RC-C
Temperature	17.2	0.0	°C	1.00	04/20/20 09:10	SM 2550B-2010		CDT	B0D0924	RC-C

Sample Number 0040979-02
Sample Description DHEC B-280 Smith Branch @ N. Main St collected on 04/20/20 09:05

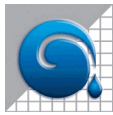
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
General Chemistry Parameters										
Total Suspended Solids	20.4	2.2	mg/L	2.22	04/21/20 08:55	SM 2540D-2011		RAM	B0D0947	RC-C

Sample Number 0040979-03
Sample Description DHEC B-280 Smith Branch @ N. Main St collected on 04/20/20 09:07

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	3870	20	MPN/100 mL	20.0	04/20/20 14:34	SM 9223B-2004		MBW	B0D1004	RC-C

Sample Number 0040979-04
Sample Description DHEC C-001 Gills Creek @ Garners Ferry Rd collected on 04/20/20 09:45

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	8.0	0.1	mg/L	1.00	04/20/20 09:45	SM 4500 OG-2011		CDT	B0D0924	RC-C
Temperature	18.2	0.0	°C	1.00	04/20/20 09:45	SM 2550B-2010		CDT	B0D0924	RC-C



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0040979
Reported: 04/29/20 11:26

Sample Number 0040979-05
Sample Description DHEC C-001 Gills Creek @ Garners Ferry Rd collected on 04/20/20 09:40

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
General Chemistry Parameters										
Total Suspended Solids	68.4	4.0	mg/L	4.00	04/21/20 08:55	SM 2540D-2011		RAM	B0D0947	RC-C

Sample Number 0040979-06
Sample Description DHEC C-001 Gills Creek @ Garners Ferry Rd collected on 04/20/20 09:42

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	5702	20	MPN/100 mL	20.0	04/20/20 14:34	SM 9223B-2004		MBW	B0D1004	RC-C

Sample Number 0040979-07
Sample Description DHEC C-017 Gills Creek @ Bluff Road collected on 04/20/20 10:32

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	7.1	0.1	mg/L	1.00	04/20/20 10:32	SM 4500 OG-2011		CDT	B0D0924	RC-C
Temperature	17.6	0.0	°C	1.00	04/20/20 10:32	SM 2550B-2010		CDT	B0D0924	RC-C

Sample Number 0040979-08
Sample Description DHEC C-017 Gills Creek @ Bluff Road collected on 04/20/20 10:25

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
General Chemistry Parameters										
Total Suspended Solids	16.6	1.8	mg/L	1.80	04/21/20 08:55	SM 2540D-2011		RAM	B0D0947	RC-C

Sample Number 0040979-09
Sample Description DHEC C-017 Gills Creek @ Bluff Road collected on 04/20/20 10:30

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	828	20	MPN/100 mL	20.0	04/20/20 14:34	SM 9223B-2004		MBW	B0D1004	RC-C



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0040979
Reported: 04/29/20 11:26

Data Qualifiers and Definitions

ND Analyte NOT DETECTED at or above the reporting limit
NR Not reported

Laboratory Reference:

RC-G = Rogers and Callcott, 426 Fairforest Way, Greenville, SC 29607 / SC Lab ID 23105
RC-C = Rogers and Callcott, 215B Stoneridge Drive, Columbia, SC 29210 / SC Lab ID 40572



Rogers & Callcott
 ENVIRONMENTAL
Half a century of commitment and quality

Mailing PO Box 5655 Shipping 426 Fairforest Way 215B Stoneridge Drive
 Address: Greenville, SC 29606 Address: Greenville, SC 29210 Columbia, SC 29210
 Phone (864) 232-1556 Fax (864) 232-6140 Phone (803) 509-8999

Client Name Woolpert - City of Columbia
Address 2000 Center Point Road Suite 2200
Columbia, SC 29210
Report To: Michael Long
Email Address Michael.long@woolpert.com
Telephone # 803-214-5936

PO # _____ **Project #** Water Quality Testing

R & C WORK ORDER	YR DATE	TIME	SAMPLE DESCRIPTION
-05	4/20	0940	DHEC C-001 (Gills Creek @ Garners Ferry Rd)
-06	1	0942	DHEC C-001 (Gills Creek @ Garners Ferry Rd)

SAMPLER RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
1. <i>[Signature]</i>	4/20/2015	2. <i>[Signature]</i>	4-20-20 1155
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
3. _____	_____	4. _____	_____
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
5. _____	_____	6. _____	_____
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
7. _____	_____	8. _____	_____

CHAIN OF CUSTODY RECORD

WORK ORDER 0040979

Parameter(s) ↑	Total Number of Containers	N	N	Filtered (Yes/No)
TSS	1	Y	N	
F. Coli	1	P	N	
D.O. - 8.00 mg/L	1	0.5G	N	
Temp - 18.2 °C	1	G	N	
Collected @ 0945	1	ww	N	
Analyzed @ 0945	1	A	N	
Weather - Cloudy 65°	1		N	

Container Type (Plastic/Glass)	Container Volume (mL)	Sample Type (Grab/Composite)	Sample Source (WW, GW, DW, SW, S, Other)	Preservation Code(s)	COMMENTS
Plastic	120	G	ww	A - None E - HCl B - HNO ₃ F - Na ₂ S ₂ O ₃ C - H ₂ SO ₄ D - NaOH	D.O. - 8.00 mg/L Temp - 18.2 °C Collected @ 0945 Analyzed @ 0945 Weather - Cloudy 65°

Mailing Address: PO Box 5655 Greenville, SC 29606
 Shipping Address: 426 Fairforest Way Greenville, SC 29607
 Phone: (864) 232-1556 Fax: (864) 232-6140

Client Name: Woolpert - City of Columbia
 Address: 2000 Center Point Road Suite 2200 Columbia, SC 29210
 Report To: Michael Long
 Email Address: Michael.long@woolpert.com
 Telephone #: 803-214-5936
 PO #: _____ Project # Water Quality Testing

215B Stoneridge Drive
 Columbia, SC 29210
 Phone (803) 509-8999

Sample Source (WW, GW, DW, SW, S, Other)
 Sample Type (Grab/Composite)
 Container Type (Plastic/Glass)
 Container Volume (mL)

R & C WORK ORDER	YR DATE	TIME	SAMPLE DESCRIPTION	Total Number of Containers	Parameter(s) ↑	TSS	F. Coli	N	N	Filtered (Yes/No)	Cooled (Yes/No)	Container Type (Plastic/Glass)	Container Volume (mL)	Sample Type (Grab/Composite)	Sample Source (WW, GW, DW, SW, S, Other)	Preservation Code(s)	COMMENTS
-08	4/20	1025	DHEC C-017 (Gills Creek @ Bluff Road)	1		1		Y	N								D.O.- 7.13 mg/L
-09	1	1030	DHEC C-017 (Gills Creek @ Bluff Road)	1			1	P	N								Temp- 17.6 °C
																	Collected @ 1032
																	Analyzed @ 1032
																	Weather- Cloudy 65°

SAMPLER RELINQUISHED BY: [Signature] DATE/TIME: 4/20/20 1155 RECEIVED BY: [Signature] DATE/TIME: 4-20-20 1155

1. RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

2. RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

3. RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

4. RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

5. RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

6. RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

7. RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

8. RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: _____ DATE/TIME: _____

Composite Start Date/Time: _____ Composite End Date/Time: _____
 Time or Flow (Circle one) Initials: _____

Temperature of blank or representative sample
 At time of collection _____ °C
 At time of lab receipt 2.4 °C

Sample Receipt Verification

Client: Woolpert Cola Date Received: 4-20-20 Work Order: 0040979

Carrier Name: (to Columbia)	Client	FedEx	UPS	US Mail	Courier	<u>Field Services</u>	Other: _____
Tracking Number: _____							

Carrier Name: (to Greenville)	Client	FedEx	UPS	US Mail	Courier	Field Services	Other: _____
Tracking Number: <u>N/A</u>							

Receipt Criteria	Y e s	No	N A	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples requiring pH preservation at proper pH? <small>Note: Samples for metals analysis may be preserved upon receipt in the lab. Note: Samples for O&G and VOA analysis – preservation checked at bench.</small>			X	
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection? <small>Note: Chlorine checked at bench for samples requiring Bacterial, VOA, and HAA analysis.</small>	X			
Samples cooled when received in Columbia ?	X			<u>Ice</u> Cold Packs Dry Ice None
Temp at time of receipt <u>2.4</u> °C				
Samples cooled when received in Greenville ?				Ice Cold Packs Dry Ice None
Temp at time of receipt <u>N/A</u> °C				

If in-house preservation used – record Lot #			
HCL		H ₃ PO ₄	
H ₂ SO ₄		NaOH	
HNO ₃		Other	

Comments:

Were non-conformance issues noted at initial sample receipt? Yes or No

Non-Conformance issue other than noted above:

Note: Samples received initially in Columbia Facility. Sample preservation checks performed at Columbia Facility. Revised March 2019

Completed by: MST

City of Columbia Quality Assurance Project Plan (QAPP) Data

Verification and Validation Form

City of Columbia Supplemental Environmental Projects QAPP

November 2015, Revised May 2017, Revised December 2018, Revised January 2019

Laboratory Report Date: 5/26/2020

The undersigned verifies the data in the above referenced report, per the QAPP requirements.

Andrea Bolling

Project Verifier/QA Manager

6/15/2020
Date

Andrea Bolling

Printed Name

The undersigned validates the data in the above referenced report, per the QAPP requirements.

AJ Jesse

Project Manager/Project Validator

6/15/2020
Date

AJ Jesse

Printed Name



Laboratory Report

Client	Woolpert Inc. - City of Columbia Michael Long 2000 Center Point Road Ste 2200 Columbia, SC 29210	Project:	Water Quality Testing
		Work Order:	0050932
		Received:	05/20/2020 12:40

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on May 20, 2020. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

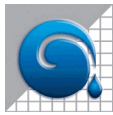
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We strive to provide excellent service to our clients. Please contact Lauren Hollister, your Project Manager, at lhollister@rcenviro.com, (864)-232-1556 if you have any questions about this report.

CC: Trevor Gauron

Report Approved By:

Lauren Hollister
Project Manager



Certificate of Analysis

*South Carolina Greenville Laboratory Identification 23105
 South Carolina Columbia Laboratory Identification 40572
 North Carolina Laboratory Certification Number 27
 North Carolina Drinking Water Lab Number 45710
 NELAP Utah Certificate Number SC000042014-1
 Georgia Drinking Water Lab ID 880*

Client Woolpert Inc. - City of Columbia
 Michael Long
 2000 Center Point Road Ste 2200
 Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0050932
Received: 05/20/2020 12:40

Sample Number	Sample Description	Matrix	Sampled	Type
0050932-01	DHEC B-280 Smith Branch @ N. Main St	Wastewater	05/20/20 10:26	Grab
0050932-02	DHEC B-280 Smith Branch @ N. Main St	Wastewater	05/20/20 10:27	Grab
0050932-03	DHEC C-001 Gills Creek @ Garners Ferry Rd	Wastewater	05/20/20 11:00	Grab
0050932-04	DHEC C-001 Gills Creek @ Garners Ferry Rd	Wastewater	05/20/20 11:02	Grab
0050932-05	DHEC C-017 Gills Creek @ Bluff Road	Wastewater	05/20/20 11:24	Grab
0050932-06	DHEC C-017 Gills Creek @ Bluff Road	Wastewater	05/20/20 11:25	Grab



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0050932
Reported: 05/26/20 11:29

Sample Data

Sample Number 0050932-01
Sample Description DHEC B-280 Smith Branch @ N. Main St collected on 05/20/20 10:26

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	7.8	0.1	mg/L	1.00	05/20/20 10:29	SM 4500 OG-2011		MBW	B0E0946	RC-C
Grab	Complete				05/20/20 10:26	Grab		MBW	B0E0946	RC-C
Temperature	18.4	0.0	°C	1.00	05/20/20 10:29	SM 2550B-2010		MBW	B0E0946	RC-C

Sample Number 0050932-02
Sample Description DHEC B-280 Smith Branch @ N. Main St collected on 05/20/20 10:27

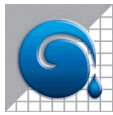
Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	6152	20	MPN/100 mL	20.0	05/20/20 14:07	SM 9223B-2004		MBW	B0E1051	RC-C
General Chemistry Parameters										
Total Suspended Solids	18.7	1.4	mg/L	1.40	05/21/20 08:20	SM 2540D-2011		RAM	B0E0999	RC-C

Sample Number 0050932-03
Sample Description DHEC C-001 Gills Creek @ Garners Ferry Rd collected on 05/20/20 11:00

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	7.2	0.1	mg/L	1.00	05/20/20 11:05	SM 4500 OG-2011		MBW	B0E0946	RC-C
Temperature	18.9	0.0	°C	1.00	05/20/20 11:05	SM 2550B-2010		MBW	B0E0946	RC-C

Sample Number 0050932-04
Sample Description DHEC C-001 Gills Creek @ Garners Ferry Rd collected on 05/20/20 11:02

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	4764	20	MPN/100 mL	20.0	05/20/20 14:07	SM 9223B-2004		MBW	B0E1051	RC-C
General Chemistry Parameters										
Total Suspended Solids	24.0	2.0	mg/L	2.00	05/21/20 08:20	SM 2540D-2011		RAM	B0E0999	RC-C



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0050932
Reported: 05/26/20 11:29

Sample Number 0050932-05
Sample Description DHEC C-017 Gills Creek @ Bluff Road collected on 05/20/20 11:24

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	6.9	0.1	mg/L	1.00	05/20/20 11:29	SM 4500 OG-2011		MBW	B0E0946	RC-C
Temperature	19.2	0.0	°C	1.00	05/20/20 11:29	SM 2550B-2010		MBW	B0E0946	RC-C

Sample Number 0050932-06
Sample Description DHEC C-017 Gills Creek @ Bluff Road collected on 05/20/20 11:25

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	3214	20	MPN/100 mL	20.0	05/20/20 14:07	SM 9223B-2004		MBW	B0E1051	RC-C
General Chemistry Parameters										
Total Suspended Solids	17.7	1.5	mg/L	1.50	05/21/20 08:20	SM 2540D-2011		RAM	B0E0999	RC-C



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

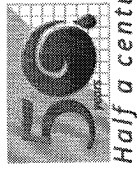
Project: Water Quality Testing
Work Order: 0050932
Reported: 05/26/20 11:29

Data Qualifiers and Definitions

ND Analyte NOT DETECTED at or above the reporting limit
NR Not reported

Laboratory Reference:

RC-G = Rogers and Callcott, 426 Fairforest Way, Greenville, SC 29607 / SC Lab ID 23105
RC-C = Rogers and Callcott, 215B Stoneridge Drive, Columbia, SC 29210 / SC Lab ID 40572



Rogers & Callcott

ENVIRONMENTAL
Half a century of commitment and quality

Mailing Address: PO Box 5655, Greenville, SC 29606, Phone (864) 232-1556
 Shipping Address: 426 Fairforest Way, Greenville, SC 29607, Phone (864) 232-6140
 215B Stoneridge Drive, Columbia, SC 29210, Phone (803) 509-8999

Client Name: Woolpert - City of Columbia
 Address: 2000 Center Point Road Suite 2200
Columbia, SC 29210
 Report To: Michael Long
 Email Address: Michael.long@woolpert.com
 Telephone # 803-214-5936
 PO # _____ Project # Water Quality Testing

CHAIN OF CUSTODY RECORD

WORK ORDER 0050932

R & C WORK ORDER	YR DATE	TIME	SAMPLE DESCRIPTION	Total Number of Containers	Parameter(s) ↑	N	Y	N	Y	Filtered (Yes/No)	Cooled (Yes/No)	Container Type (Plastic/Glass)	Container Volume (mL)	Sample Type (Grab/Composite)	Sample Source (WW, GW, DW, SW, S, Other)	Preservation Code(s)	COMMENTS	
<u>02</u>	<u>5-20</u>	<u>1027</u>	DHEC B-280 (Smith Branch @ N. Main St)	1	TSS													
<u>02</u>	<u>5-20</u>	<u>1027</u>	DHEC B-280 (Smith Branch @ N. Main St)	1	F. Coll													D.O.- 7.80 mg/L Temp- 18.4 °C Collected @ 1020 Analyzed @ 1029
																		Weather- Rain 60°F

DATE/TIME: 5/20/2012 Composite Start Date/Time: _____
 DATE/TIME: _____ Composite End Date/Time: _____
 DATE/TIME: _____ Time or Flow (Circle one) Initials: _____
 DATE/TIME: _____ Temperature of blank or representative sample
 DATE/TIME: _____ At time of collection _____ °C
 DATE/TIME: _____ At time of lab receipt 0.4 °C



Mailing Address: PO Box 5655
Greenville, SC 29606
Phone (864) 232-1556

Shipping Address: 426 Fairforest Way
Greenville, SC 29607
Phone (864) 232-6140

Client Name: Woolpert - City of Columbia

Address: 2000 Center Point Road Suite 2200
Columbia, SC 29210

Report To: Michael Long

Email Address: Michael.long@woolpert.com

Telephone # 803-214-5936

PO # _____ Project # Water Quality Testing

CHAIN OF CUSTODY RECORD

WORK ORDER

0050932

R & C WORK ORDER	YR 20 DATE	TIME	SAMPLE DESCRIPTION	Total Number of Containers	Parameter(s) ↑	N	N	Filtered (Yes/No)	Cooled (Yes/No)	Container Type (Plastic/Glass)	Container Volume (mL)	Sample Type (Grab/Composite)	Sample Source (WW, GW, DW, SW, S, Other)	Preservation Code(s)	COMMENTS
<u>04</u>	<u>5-20</u>	<u>1102</u>	DHEC C-001 (Gills Creek @ Garners Ferry Rd)	1	TSS									A - None E - HCl I - Zn Acetate B - HNO ₃ F - Na ₂ S ₂ O ₃ J - H ₃ PO ₄ C - H ₂ SO ₄ G - Boric Acid K - NaH ₂ PO ₄ D - NaOH H - Ascorbic Acid L - NH ₄ Cl	D.O.- <u>7.23</u> mg/L
<u>04</u>	<u>5-20</u>	<u>1102</u>	DHEC C-001 (Gills Creek @ Garners Ferry Rd)	1	F. Coli										Temp- <u>18.9</u> °C
															Collected @ <u>1100</u>
															Analyzed @ <u>1105</u>
															Weather- <u>Rain</u> <u>61° F</u>

SAMPLER - RELINQUISHED BY: Randi B. Wright DATE/TIME: 5-20-20 1240 RECEIVED BY: [Signature]

RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: 4. _____

RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: 6. _____

RELINQUISHED BY: _____ DATE/TIME: _____ RECEIVED BY: 8. _____

DATE/TIME: 5/20/20 1240 Composite Start Date/Time: _____

DATE/TIME: _____ Composite End Date/Time: _____

DATE/TIME: _____ Time or Flow (Circle one) Initials: _____

DATE/TIME: _____ Temperature of blank or representative sample

DATE/TIME: _____ At time of collection _____ °C

DATE/TIME: _____ At time of lab receipt 0.4 °C



Rogers & Callcott

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Half a century of commitment and quality

Mailing Address: PO Box 5655
Greenville, SC 29606
Phone (864) 232-1556

Shipping Address: 426 Fairforest Way
Greenville, SC 29607
Phone (864) 232-6140

215B Stoneridge Drive
Columbia, SC 29210
Phone (803) 509-8999

Client Name: Woolpert - City of Columbia
Address: 2000 Center Point Road Suite 2200
Columbia, SC 29210
Report To: Michael Long
Email Address: Michael.long@woolpert.com
Telephone #: 803-214-5936
PO # _____ Project # Water Quality Testing

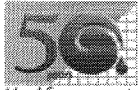
CHAIN OF CUSTODY RECORD

WORK ORDER

0050932

R & C WORK ORDER	YR DATE	TIME	SAMPLE DESCRIPTION	Total Number of Containers	Parameter(s) ↓	N	N	Filtered (Yes/No)	Cooled (Yes/No)	Container Type (Plastic/Glass)	Container Volume (mL)	Sample Type (Grab/Composite)	Sample Source (WW, GW, DW, SW, S, Other)	Preservation Code(s)	COMMENTS
<u>06</u>	<u>5-20</u>	<u>1125</u>	<u>DHEC C-017 (Gills Creek @ Bluff Road)</u>	<u>1</u>	<u>TSS</u>	<u>Y</u>	<u>N</u>							<u>E - HCl</u>	<u>D.O. - 6.86 mg/L</u>
<u>06</u>	<u>5-20</u>	<u>1125</u>	<u>DHEC C-017 (Gills Creek @ Bluff Road)</u>	<u>1</u>	<u>F. Coli</u>	<u>Y</u>	<u>Y</u>							<u>F - Na₂S₂O₃</u>	<u>Temp - 19.2 °C</u>
						<u>P</u>	<u>P</u>							<u>G - Boric Acid</u>	<u>Collected @ 1124</u>
						<u>0.5G</u>	<u>120</u>							<u>H - Ascorbic Acid</u>	<u>Analyzed @ 1129</u>
						<u>G</u>	<u>G</u>							<u>I - Zn Acetate</u>	<u>Weather - Rain 61°F</u>
						<u>WW</u>	<u>WW</u>							<u>J - H₃PO₄</u>	
						<u>A</u>	<u>F</u>							<u>K - NaH₂PO₄</u>	
														<u>L - NH₄Cl</u>	

SAMPLER - RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
<u>Nandi B. Wright</u>	<u>5-20-20 1240</u>	<u>[Signature]</u>	<u>5-20-20 1240</u>
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:



Sample Receipt Verification

Client: Woolpert-Columbia Date Received: 5/20/20 Work Order: 0050932

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____
Tracking Number: _____

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____
Tracking Number: NA

Receipt Criteria	Yes	No	NA	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab. Note: Samples for O&G and VOA analysis – preservation checked at bench.			X	
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial, VOA, and HAA analysis.	X			
Samples cooled when received in Columbia ?	Temp at time of receipt <u>04</u> °C Temp measured with IR SN: 36301069WS	X		<u>Ice</u> Cold Packs Dry Ice None
Samples cooled when received in Greenville ?	Temp at time of receipt <u>NA</u> °C Temp measured with IR SN: 97050067			Ice Cold Packs Dry Ice None

If in-house preservation used – record Lot #

HCL		H ₃ PO ₄	
H ₂ SO ₄		NaOH	
HNO ₃		Other	

Comments:

Were non-conformance issues noted at initial sample receipt? Yes or No
Non-Conformance issue other than noted above:

Note: Samples received initially in Columbia Facility. Sample preservation checks performed at Columbia Facility. Revised March 2019

Completed by: ABB

City of Columbia Quality Assurance Project Plan (QAPP) Data

Verification and Validation Form

City of Columbia Supplemental Environmental Projects QAPP

November 2015, Revised May 2017, Revised December 2018, Revised January 2019

Laboratory Report Date: 6/24/2020

The undersigned verifies the data in the above referenced report, per the QAPP requirements.

Andrea Bolling
Project Verifier/QA Manager

7/7/2020
Date

Andrea Bolling
Printed Name

The undersigned validates the data in the above referenced report, per the QAPP requirements.

AR Jessor
Project Manager/Project Validator

7/7/2020
Date

AJ Jessor
Printed Name



Laboratory Report

Client	Woolpert Inc. - City of Columbia Michael Long 2000 Center Point Road Ste 2200 Columbia, SC 29210	Project:	Water Quality Testing
		Work Order:	0060986
		Received:	06/22/2020 12:55

Dear Client:

Rogers and Callcott appreciates the opportunity to be of service to you. The attached laboratory services report includes analytical results and chain of custody for samples that were received on June 22, 2020. Rogers and Callcott maintains a formal QA/QC program. Unless otherwise noted, all analyses performed under NELAP certification have complied with all the requirements for the TNI standard. The analyses met the QA/QC confidence interval for each test method unless otherwise qualified. Estimated uncertainty is available upon request.

Privileged / Confidential information may be contained in this report and is intended only for the use of the addressee. If you are not the addressee, or the person responsible for delivering to the person addressed, you may not copy or deliver this message to anyone else. If you receive this message by mistake, please notify Rogers and Callcott immediately.

We strive to provide excellent service to our clients. Please contact Lauren Hollister, your Project Manager, at lhollister@rcenviro.com, (864)-232-1556 if you have any questions about this report.

CC: Trevor Gauron

Report Approved By:

Lauren Hollister
Project Manager



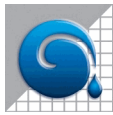
Certificate of Analysis

*South Carolina Greenville Laboratory Identification 23105
 South Carolina Columbia Laboratory Identification 40572
 North Carolina Laboratory Certification Number 27
 North Carolina Drinking Water Lab Number 45710
 NELAP Utah Certificate Number SC000042014-1
 Georgia Drinking Water Lab ID 880*

Client Woolpert Inc. - City of Columbia
 Michael Long
 2000 Center Point Road Ste 2200
 Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0060986
Received: 06/22/2020 12:55

Sample Number	Sample Description	Matrix	Sampled	Type
0060986-01	DHEC C-017 Gills Creek @ Bluff Road	Wastewater	06/22/20 11:36	Grab
0060986-02	DHEC C-017 Gills Creek @ Bluff Road	Wastewater	06/22/20 11:37	Grab
0060986-03	DHEC C-001 Gills Creek @ Garners Ferry Rd	Wastewater	06/22/20 12:01	Grab
0060986-04	DHEC C-001 Gills Creek @ Garners Ferry Rd	Wastewater	06/22/20 12:02	Grab
0060986-05	DHEC B-280 Smith Branch @ N. Main St	Wastewater	06/22/20 12:38	Grab
0060986-06	DHEC B-280 Smith Branch @ N. Main St	Wastewater	06/22/20 12:39	Grab



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0060986
Reported: 06/24/20 10:28

Sample Data

Sample Number 0060986-01
Sample Description DHEC C-017 Gills Creek @ Bluff Road collected on 06/22/20 11:36

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	6.0	0.1	mg/L	1.00	06/22/20 11:40	SM 4500 OG-2011		MBW	B0F0981	RC-C
Grab	Complete				06/22/20 11:36	Grab		MBW	B0F0981	RC-C
Temperature	27.5	0.0	°C	1.00	06/22/20 11:40	SM 2550B-2010		MBW	B0F0981	RC-C

Sample Number 0060986-02
Sample Description DHEC C-017 Gills Creek @ Bluff Road collected on 06/22/20 11:37

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	1446	20	MPN/100 mL	20.0	06/22/20 14:27	SM 9223B-2004		MBW	B0F1056	RC-C
General Chemistry Parameters										
Total Suspended Solids	11.7	1.7	mg/L	1.67	06/23/20 09:21	SM 2540D-2011		RAM	B0F1015	RC-C

Sample Number 0060986-03
Sample Description DHEC C-001 Gills Creek @ Garners Ferry Rd collected on 06/22/20 12:01

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	7.1	0.1	mg/L	1.00	06/22/20 12:05	SM 4500 OG-2011		MBW	B0F0981	RC-C
Temperature	32.7	0.0	°C	1.00	06/22/20 12:05	SM 2550B-2010		MBW	B0F0981	RC-C

Sample Number 0060986-04
Sample Description DHEC C-001 Gills Creek @ Garners Ferry Rd collected on 06/22/20 12:02

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	426	20	MPN/100 mL	20.0	06/22/20 14:27	SM 9223B-2004		MBW	B0F1056	RC-C
General Chemistry Parameters										
Total Suspended Solids	14.0	2.0	mg/L	2.00	06/23/20 09:21	SM 2540D-2011		RAM	B0F1015	RC-C



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

Project: Water Quality Testing
Work Order: 0060986
Reported: 06/24/20 10:28

Sample Number 0060986-05
Sample Description DHEC B-280 Smith Branch @ N. Main St collected on 06/22/20 12:38

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Field Parameters										
Dissolved Oxygen	7.2	0.1	mg/L	1.00	06/22/20 12:40	SM 4500 OG-2011		MBW	B0F0981	RC-C
Temperature	36.2	0.0	°C	1.00	06/22/20 12:40	SM 2550B-2010		MBW	B0F0981	RC-C

Sample Number 0060986-06
Sample Description DHEC B-280 Smith Branch @ N. Main St collected on 06/22/20 12:39

Parameter	Result	Reporting Limit	Units	DF	Analyzed	Method	Flag	Analyst	Batch	Lab
Microbiological Parameters										
E. Coli	374	20	MPN/100 mL	20.0	06/22/20 14:27	SM 9223B-2004		MBW	B0F1056	RC-C
General Chemistry Parameters										
Total Suspended Solids	1.6	1.0	mg/L	1.00	06/23/20 09:21	SM 2540D-2011		RAM	B0F1015	RC-C



Woolpert Inc. - City of Columbia
2000 Center Point Road Ste 2200
Columbia, SC 29210

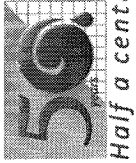
Project: Water Quality Testing
Work Order: 0060986
Reported: 06/24/20 10:28

Data Qualifiers and Definitions

ND Analyte NOT DETECTED at or above the reporting limit
NR Not reported

Laboratory Reference:

RC-G = Rogers and Callcott, 426 Fairforest Way, Greenville, SC 29607 / SC Lab ID 23105
RC-C = Rogers and Callcott, 215B Stoneridge Drive, Columbia, SC 29210 / SC Lab ID 40572



Rogers & Callcott
ENVIRONMENTAL
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Mailing Address: PO Box 5655 Greenville, SC 29606 Phone (864) 232-1556
Shipping Address: 426 Fairforest Way Greenville, SC 29607 Phone (864) 232-6140
215B Stoneridge Drive Columbia, SC 29210 Phone (803) 509-8999

Client Name: Woolpert - City of Columbia
Address: 2000 Center Point Road Suite 2200 Columbia, SC 29210
Report To: Michael Long
Email Address: Michael.long@woolpert.com
Telephone #: 803-214-5936
Project # Water Quality Testing

CHAIN OF CUSTODY RECORD

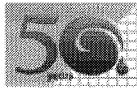
WORK ORDER 0000980

R & C WORK ORDER	YR DATE	TIME	SAMPLE DESCRIPTION	Total Number of Containers	Parameter(s) ↑	A	F	G	P	Y	N	Filtered (Yes/No)	Cooled (Yes/No)	Container Type (Plastic/Glass)	Container Volume (mL)	Sample Type (Grab/Composite)	Sample Source (WW, GW, DW, SW, S, Other)	Preservation Code(s)		COMMENTS		
																		A - None	E - HCl		B - HNO ₃	F - Na ₂ S ₂ O ₃
-02	6-22	1137	DHEC C-017 (Gills Creek @ Bluff Road)	1	TSS																D.O. - 6.02 mg/L	
-02	6-22	1137	DHEC C-017 (Gills Creek @ Bluff Road)	1																		Temp - 27.5 °C
																						Collected @ 1147 6-22-20 new 1134
																						Analyzed @ 1140
																						Weather - 92° F Fair

SAMPLER - RELINQUISHED BY: <u>1. Mendi D. Wright</u>	DATE/TIME: <u>6-22-20 1255</u>	RECEIVED BY: <u>[Signature]</u>	DATE/TIME: <u>06/20 0355</u>
RELINQUISHED BY: <u>3.</u>	DATE/TIME: <u></u>	RECEIVED BY: <u>4.</u>	DATE/TIME: <u></u>
RELINQUISHED BY: <u>5.</u>	DATE/TIME: <u></u>	RECEIVED BY: <u>6.</u>	DATE/TIME: <u></u>
RELINQUISHED BY: <u>7.</u>	DATE/TIME: <u></u>	RECEIVED BY: <u>8.</u>	DATE/TIME: <u></u>

Composite Start Date/Time: _____
Composite End Date/Time: _____
Time or Flow (Circle one) Initials: _____

Temperature of blank or representative sample
At time of collection _____ °C
At time of lab receipt 0.3 °C



Sample Receipt Verification

Client: Woolpert Date Received: 6/22/20 Work Order: 0060986

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____
Tracking Number: _____

Carrier Name: Client FedEx UPS US Mail Courier Field Services Other: _____
Tracking Number: NA

Receipt Criteria	Y e s	No	N A	Comments
Shipping container / cooler intact?	X			Damaged Leaking Other:
Custody seals intact?			X	
COC included with samples?	X			
COC signed when relinquished and received?	X			
Sample bottles intact?	X			Damaged Leaking Other:
Sample ID on COC agree with label on bottle(s)?	X			
Date / time on COC agree with label on bottle(s)?	X			
Number of bottles on COC agrees with number of bottles received?	X			
Samples received within holding time?	X			
Sample volume sufficient for analysis?	X			
VOA vials free of headspace (<6mm bubble)?			X	
Samples requiring pH preservation at proper pH? Note: Samples for metals analysis may be preserved upon receipt in the lab. Note: Samples for O&G and VOA analysis – preservation checked at bench.			X	
Samples dechlorinated for parameters requiring chlorine removal at the time of sample collection? Note: Chlorine checked at bench for samples requiring Bacterial, VOA, and HAA analysis.	X			
Samples cooled when received in Columbia ?	Temp at time of receipt <u>0.3</u> °C Temp measured with IR SN: 36301069WS	X		<u>Ice</u> Cold Packs Dry Ice None
Samples cooled when received in Greenville ?	Temp at time of receipt <u>NA</u> °C Temp measured with IR SN: 97050067			Ice Cold Packs Dry Ice None

If in-house preservation used – record Lot #

HCL		H ₃ PO ₄	
H ₂ SO ₄		NaOH	
HNO ₃		Other	

Comments:

Were non-conformance issues noted at initial sample receipt? Yes or No
Non-Conformance issue other than noted above:

Appendix A

Notice of Force Majeure Event



We Are Columbia

April 7, 2020

BY U.S. MAIL TO:

Chief, Water Programs Enforcement Branch
Water Protection Division
U.S Environmental Protection Agency, Region 4
61 Forsyth Street, S.W.
Atlanta, GA 30303

Mr. Randy Stewart
SCDHEC-Bureau of Water
Water Pollution Control Division
2600 Bull Street
Columbia, SC 29201

William Weinischke, Esquire
Environmental Enforcement Section
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, DC 20044-7611
Re: DOJ No. 90-5-1-1-09954

AND BY ELECTRONIC MAIL TO:

Nathan M .Haber, Esquire (habernm@dhec.sc.gov)
William Weinischke, Esquire (bill.weinischke@usdoj.gov)
Paul Schwartz, Esquire (Schwartz.paul@epa.gov)
Beth Drake, Esquire (beth.drake@usdoj.gov)
Carol DeMarco King, Esquire (King.carol@epa.gov)
Richard Elliott (Elliott.richard@epa.gov)

Re: *The United States of America and State of South Carolina by and through the Department of Health and Environmental Control vs. The City of Columbia*
Civil Action No. 3:13-2429-TLW
DOJ Case Number 90-5-1-1-00954

Dear Sirs and Madams:

Pursuant to Section XI of the above-referenced Consent Decree and in accordance with guidance in the Memorandum regarding COVID-19 Implications for EPA's Enforcement and Compliance Assurance Program issued by EPA on March 26, 2020,

Teresa Wilson • City Manager
1737 Main Street • P.O. Box 147 • Columbia, South Carolina 29217
Office: 803.545.3026 • Fax: 803.545.3051 • Email: tbwilson@columbiasc.net



We Are Columbia

the City of Columbia is providing notice that the COVID-19 pandemic is expected to result in delays in the performance of the City's obligations under the Consent Decree.

On March 13, 2020, the Governor of South Carolina declared a state of emergency based on a determination that COVID-19 posed an imminent public health emergency for the State. Since March 13, 2020, the Governor has issued ten additional executive orders, imposing emergency measures in response to the COVID-19 pandemic, including, but not limited to, prohibiting restaurants from providing on-premises dining, directing non-essential state workers to work from home, limiting public gatherings, closing public access to beaches and other public waters of this states, and ordering the closure of non-essential business. In these executive orders, the Governor has progressively broadened the definition of non-essential business. On April 3, 2020, the Governor issued an executive order requiring the closure of additional businesses, venues, facilities, services, and activities in the general category of retail stores.

On March 17, 2020, the Mayor and City Council declared a local state of emergency in the City. On March 26, 2020, the City Council enacted an emergency ordinance, which mandates that individuals stay at home except for work at or conducting business with establishments providing essential services. The emergency ordinance further required individuals to practice social distancing of six feet when working and conducting business in the City or participating in permissible outdoor recreational activities. The City implemented these and other measures based on the guidelines of the Center for Disease Control (CDC) and the South Carolina Department of Health and Environmental Control (SCDHEC). The City continues to evaluate measures to control the spread of infection under the guidance of the CDC and SCDHEC. Based on the current rate of spread of COVID-19 through the United States and within South Carolina, the City currently expects such measures will be necessary at least through the end of April.

The COVID-19 pandemic and the measures implemented to limit the spread of infection are expected to negatively impact the City's ability to perform its obligations under the Consent Decree in a number of ways. Obviously, the City's leadership is continuing to maintain City services and operations while anticipating potential worker shortages—both City staff and contractors. Even without such worker shortages, City wastewater improvement projects, including those required under the Consent Decree, may be hindered by the social distancing requirements

Teresa Wilson • City Manager

1737 Main Street • P.O. Box 147 • Columbia, South Carolina 29217

Office: 803.545.3026 • Fax: 803.545.3051 • Email: tbwilson@columbiasc.net



We Are Columbia

for workers. Moreover, at least one contractor has already suspended work related to Consent Decree obligations due to concerns for employee safety during the COVID-19 pandemic. Any prolonged suspension or curtailment of contractor work due to COVID-19 could also affect the availability of contractors for Consent Decree work and for support of City utility operations for months and even years to come.

The COVID-19 pandemic is also expected to negatively impact the City's financial resources needed for utility operations and Consent Decree work. By letter dated March 14, 2020, the Governor directed the Office of Regulatory Staff to request that regulated utilities, including those not regulated by the utilities commission, not suspend or disconnect essential service for non-payment during the state of emergency. For many residents and businesses, unemployment and the interruption of business due to COVID-19 for even a short time could lead to financial vulnerability for many months. Indeed, some businesses, particularly restaurants and bars, may not be able to re-open once the COVID-19 restriction on operation are lifted. Finally, if the COVID-19 pandemic leads to a prolonged economic downturn, the City's ability to generate the revenue necessary to perform the Consent Decree obligations under the current schedule may be impacted by reduced revenues and the inability to impose rate increases on and recover delinquent service fees from residents and businesses.

Given the continuing state of emergency, the City will not be able to provide all of the information required within seven days under Paragraph 56 of the Consent Decree. Therefore, the City requests that this notice serve as the 72-hour initial notice and the written 7-day notice until the COVID-19 pandemic has been contained and normal operations resumed. At that time, the City will provide the a more complete description of the specific reasons for the delay, the anticipated Consent Decree obligations which will be delayed and the duration of such delay, all actions taken or to be taken in an effort to prevent or minimize the delays, and a schedule for implementation of any measures to be taken in an effort to prevent or mitigate the delays or the effect of the delays. Please be assured that the City takes its obligations pursuant to the Consent Decree very seriously, but must first direct all of its otherwise available resources to responding to the current state of emergency. At this time, the City has contingencies in place to ensure continued operation of the wastewater collection and treatment system and does not expect that the impacts of the COVID-19 pandemic will result in any endangerment to public health, welfare or the environment.

Teresa Wilson • City Manager

1737 Main Street • P.O. Box 147 • Columbia, South Carolina 29217

Office: 803.545.3026 • Fax: 803.545.3051 • Email: tbwilson@columbiasc.net



We Are Columbia

The City appreciates your consideration of this force majeure notice and the request to provide additional information required under Paragraph 56 of the Consent Decree once the COVID-19 pandemic is contained and the City is better able to fully assess the impacts on its performance of its Consent Decree obligations. If additional information is needed in support of this request, please do not hesitate to contact me.

Sincerely,

Teresa B. Wilson
City Manager

Teresa Wilson • City Manager

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