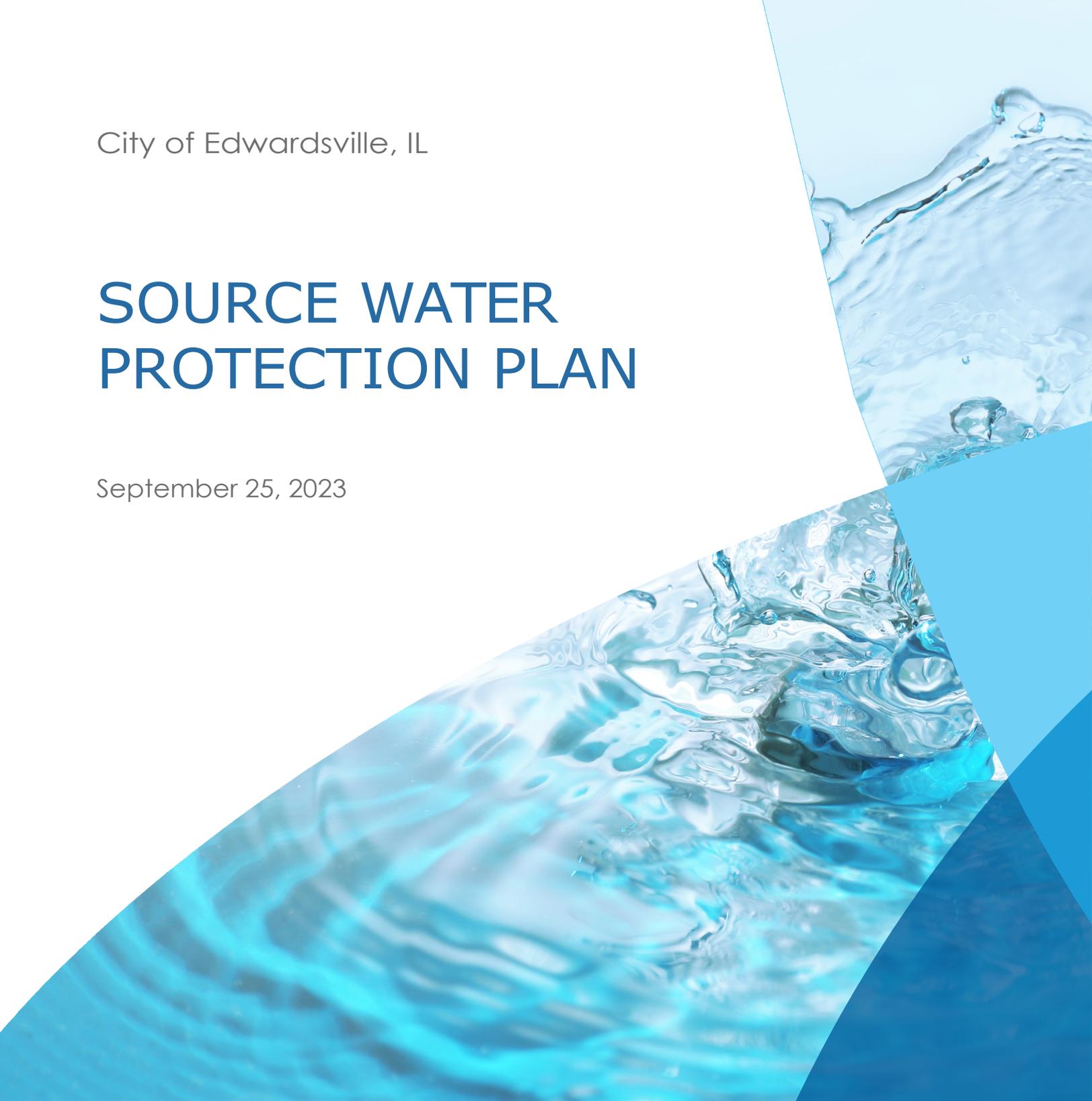


City of Edwardsville, IL

SOURCE WATER PROTECTION PLAN

September 25, 2023



Crawford, Murphy & Tilly



waterwell

Table of Contents

Part 1.	Vision Statement.....	3
1.01	Commitment to Protecting Source Water.....	3
1.02	Available Resources.....	3
1.03	Barriers to Source Water Protection	3
1.04	Plan Authors	4
Part 2.	Source Water Assessment	5
2.01	Importance of Source Water.....	5
2.02	Delineation of Sources.....	5
2.03	Source Water Quality.....	8
2.04	Finished Water Quality.....	9
2.05	Potential Source Water Contamination Sources.....	10
2.06	Susceptibility to Contamination.....	10
2.07	Existing Source Water Protection.....	10
Part 3.	Objectives	12
Part 4.	Action Plan	13
4.01	Action Plan Activities.....	13
4.02	Schedule for Implementing Projects, Programs, and Activities	14
4.03	Identification of Necessary Resources to Implement the Plan	15
4.04	Identification of Potential Problems and Obstacles for Implementation.....	16
Part 5.	Appendices.....	16
5.01	Appendix A: Capital Improvement Projects (CIPs) Completed in Past 10 Years.....	17
5.02	Appendix B: Current and Future Activities by SWPP Objective.....	18
5.03	Appendix C: Well Testing Results	19
5.04	Appendix D: Certified Laboratory Reports dated June 1, 2023.....	25

List of Exhibits and Tables

Exhibit A.	Aquifer Boundaries	6
Exhibit B.	Mississippi River Valley Watershed Illinois Limits	7
Exhibit C.	Approximate Well Locations.....	8
Table 1.	Water Sampling Schedule.....	8
Table 2.	Water Quality - PFAS.....	9
Table 3.	New Source Water Protection Plan Activities Schedule.....	14
Table C-1.	Yearly Averaged Well Drawdown Data.....	19

Figure C-1. Yearly Averaged Well Drawdown Data for Well 720

Figure C-2. Yearly Averaged Well Drawdown Data for Well 8.....21

Figure C-3. Yearly Averaged Well Drawdown Data for Well 9.....21

Figure C-4. Yearly Averaged Well Drawdown Data for Well 10.....22

Figure C-5. Yearly Averaged Well Drawdown Data for Well 1122

Figure C-6. Yearly Averaged Well Drawdown Data for Well 1223

Figure C-7. Yearly Averaged Well Drawdown Data for Well 1323

Figure C-8. Yearly Averaged Well Drawdown Data for Well 14.....24

Figure C-9. Yearly Averaged Well Drawdown Data for Well 15.....24

Part 1. Vision Statement

1.01 Commitment to Protecting Source Water

The City of Edwardsville's policy and commitment to protecting source water is reflected in the following Vision Statement developed by the Edwardsville Source Water Protection Plan team. This Vision Statement represents Edwardsville's ongoing commitment to Source Water Protection:

Edwardsville's Source Water Protection Program is dedicated to the safety, reliability, and sustainability of the City's drinking water source for our community now and into the future through a strategic and proactive approach.

Edwardsville's long history of meeting and exceeding standards of drinking water quality, along with its ongoing efforts described in this Plan, serve as a demonstration of this commitment.

1.02 Available Resources

The City of Edwardsville (City) operates the water system as an enterprise fund. Meaning, the City's water system is a self-supporting fund where the expenditures are supported fully by usages fees. The City allocates these expenditures annually with its fiscal year beginning in May. Fiscal year 2023/24 includes the development of a Source Water Protection Plan (SWPP). This document defines that Plan. Additional resources may be required for future action steps and will be included in future budgets as needed.

In addition to the resource allocated above, the following stakeholders have also been considered in the development of this SWPP and will be included in continued efforts to protect Edwardsville's source water:

- Edwardsville's Public Works and Communications Departments
- Veolia Water North America-Central, LLC (Veolia)
- Southern Illinois University Edwardsville (SIUE)
- Illinois EPA – Bureau of Water
- US Army Corp of Engineers
- Madison County Stormwater Commission

1.03 Barriers to Source Water Protection

Edwardsville and its Public Works Department recognize the following potential barriers to source water protection:

WATER SOURCE SIZE

Edwardsville sources its water from two well fields near the water treatment plant, each drawing from the American Bottoms Alluvial Aquifer. The aquifer covers approximately 787 square miles of Illinois, including major portions of St. Clair, Madison, and Monroe counties. Exhibit A shows the approximate boundaries of the aquifer with respect to Illinois' counties. The size of the aquifer along with the vast number of people and entities who depend on this aquifer for drinking water, make protection of water quality a complicated and shared responsibility—across counties, communities and regulating agencies of various scales.

LIMITED RESOURCES

Source water protection is one of many priorities for the community. The City works closely with the Illinois Environmental Protection Agency (IEPA) to assist in protecting Edwardsville's source water.

CONTRACTUAL REQUIREMENTS

Edwardsville currently provides water to Southern Illinois University Edwardsville as a wholesale water provider. As a wholesale provider, the City has contractual obligations to provide a certain water quality.

1.04 Plan Authors

This Plan was assembled by City of Edwardsville and Veolia Water North America-Central, LLC (Veolia Water) staff listed below with assistance from Crawford, Murphy & Tilly, Inc. (CMT) and Waterwell, LLC. The standard G300-14, "Source Water Protection," produced by the American Water Works Association, and the requirements of the Illinois Administrative Code Title 35, Administrative Code 604, Subtitle F, Subpart C: Source Water Protection Plan were used as guidance.

Name	Title
Ryan Zwijack	City Engineer
Cathy Hensley	City Communications Coordinator
Billy Seitz	Assistant Project Manager
Mike Jones	Project Manager

(Rest of page left blank intentionally)

Part 2. Source Water Assessment

2.01 Importance of Source Water

Edwardsville's source of water, the American Bottoms Aquifer is a surficial alluvial aquifer that resides along the Mississippi River in southwestern Illinois directly east of St. Louis, MO and is an incredible source of fresh groundwater for that area. Composed of sand, clay, and gravel sediments predominantly deposited by the ancient Mississippi River, the American Bottoms Aquifer is highly transmissive. Edwardsville recognizes the importance of its drinking water source as the aquifer is shallow and unconfined, thus subject to contamination.

Edwardsville treats water from nine active City water supply wells to supply water to over 26,800 residents and businesses in Edwardsville. The wells range in depth from 112 to 117 feet, each with a pumping capacity of 1,250 to 1,500 gallons per minute (gpm). Raw water is pumped from a combination of any of the nine wells to the plant where the water is blended and treated. Different combinations of wells are used depending upon water usage and water quality requirements.

At its capacity, Edwardsville's water treatment plant is rated for 7.2 million gallons of drinking water per day (MGD), currently they treat an average of 3.9 MGD. Edwardsville and its Public Works Department and contracted Veolia operations staff are committed to being good stewards of this precious resource, as demonstrated by the initiatives and activities outlined in this Plan.

2.02 Delineation of Sources

As mentioned above, Edwardsville uses American Bottoms Alluvial Aquifer as its water source. Exhibit A shows a map of the aquifer boundaries. The Mississippi River Valley Water Basin covers over 1.2 million square miles of North America. The subbasin where Edwardsville resides is around 1,646 square miles—just under 900 of which are within the State of Illinois. The Illinois limits of Mississippi River Valley Watershed are shown in Exhibit B. According to an inventory assembled by the Illinois Department of Natural Resources in 1995, the primary land use in Illinois' portion of the watershed is rural, with primarily agricultural use and some forest, woodlands, and wetlands.

Exhibit C shows an approximate location of Edwardsville's shallow groundwater wells. The West Well Field is directly adjacent to the water treatment plant and the East Well Field is just over a mile southeast of the West Well Field. Wells 7 through 13, located in the West Well Field, were installed between 1972 and 1998. These wells range in depth from 112 to 117 feet. Each well is housed in its own structure and are approximately 150 feet apart. The entire well field is located within the water treatment plant fence. Wells 14 and 15, both installed in 2013, are in the East Well Field. They range in depth from 112 to 117 feet.

The wells are inspected, cleaned, and tested annually by Edwardsville's contract operations team at Veolia. The well capacity is measured, and the flowmeters are also inspected and calibrated regularly. In addition, each well has preventative and predictive maintenance which include vibration analysis, bowl inspection, visual well casing and screen inspection, and motor amperage draws.

Exhibit A. Aquifer Boundaries

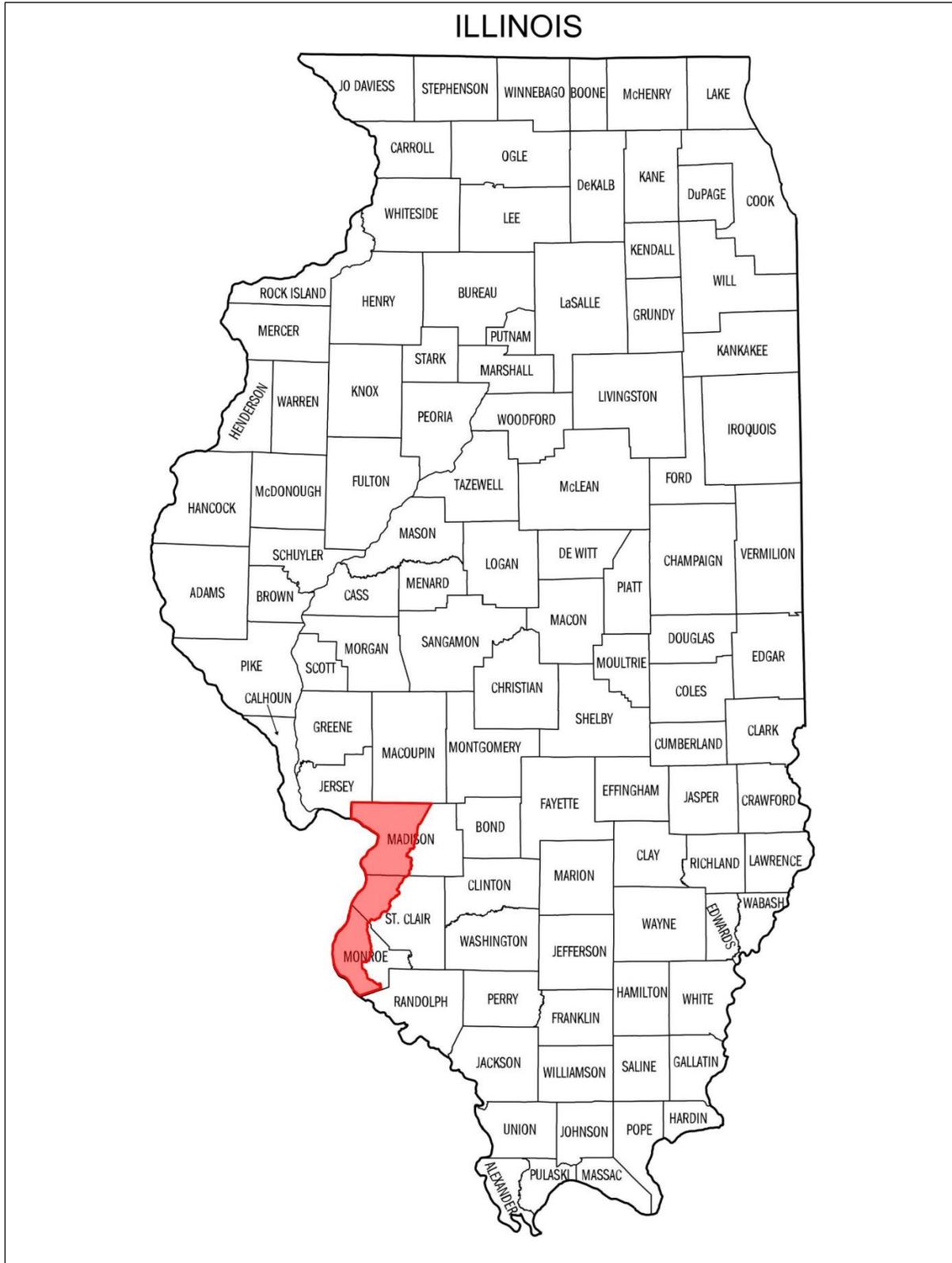


Exhibit B. Mississippi River Valley Watershed Illinois Limits

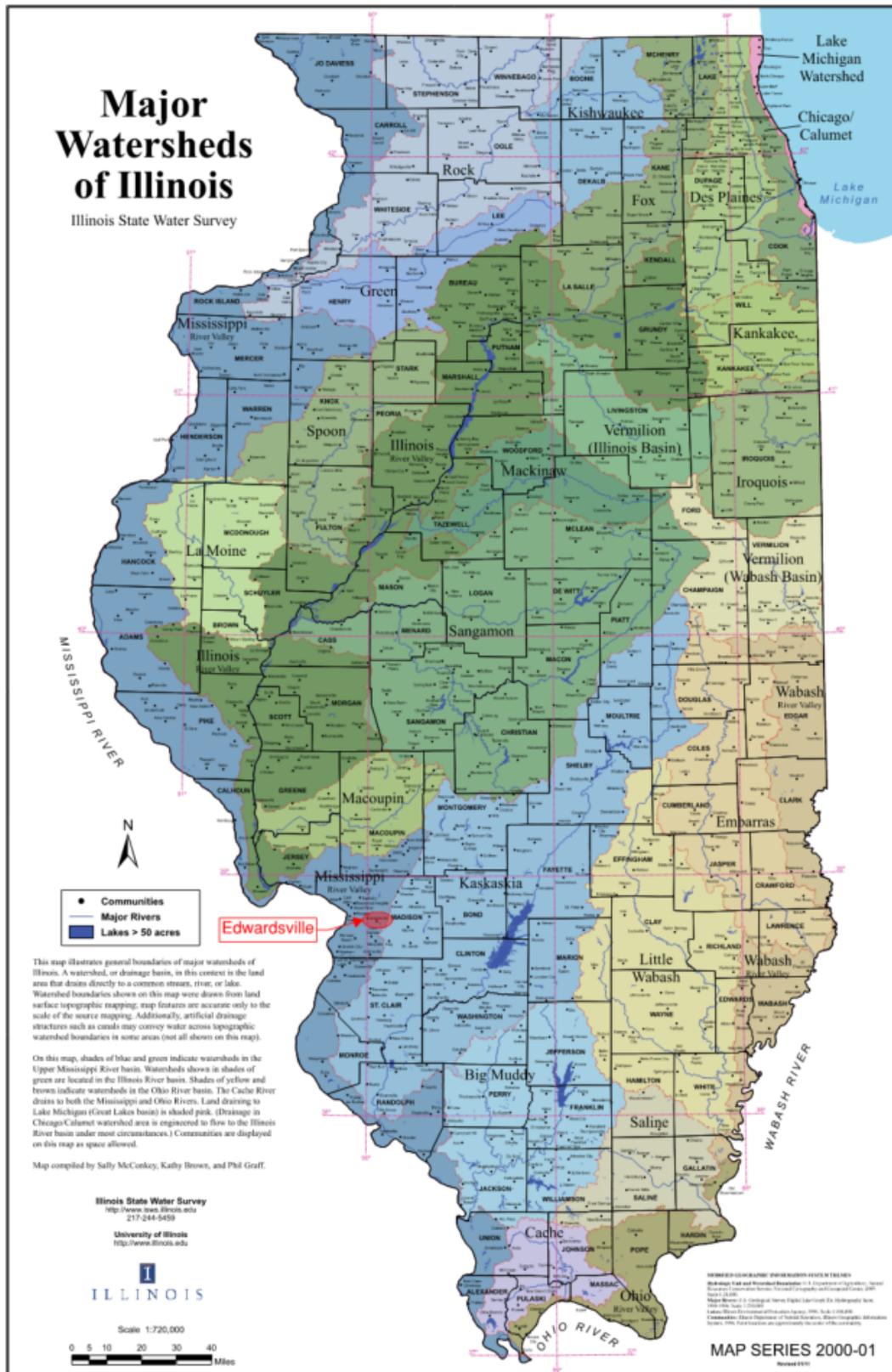
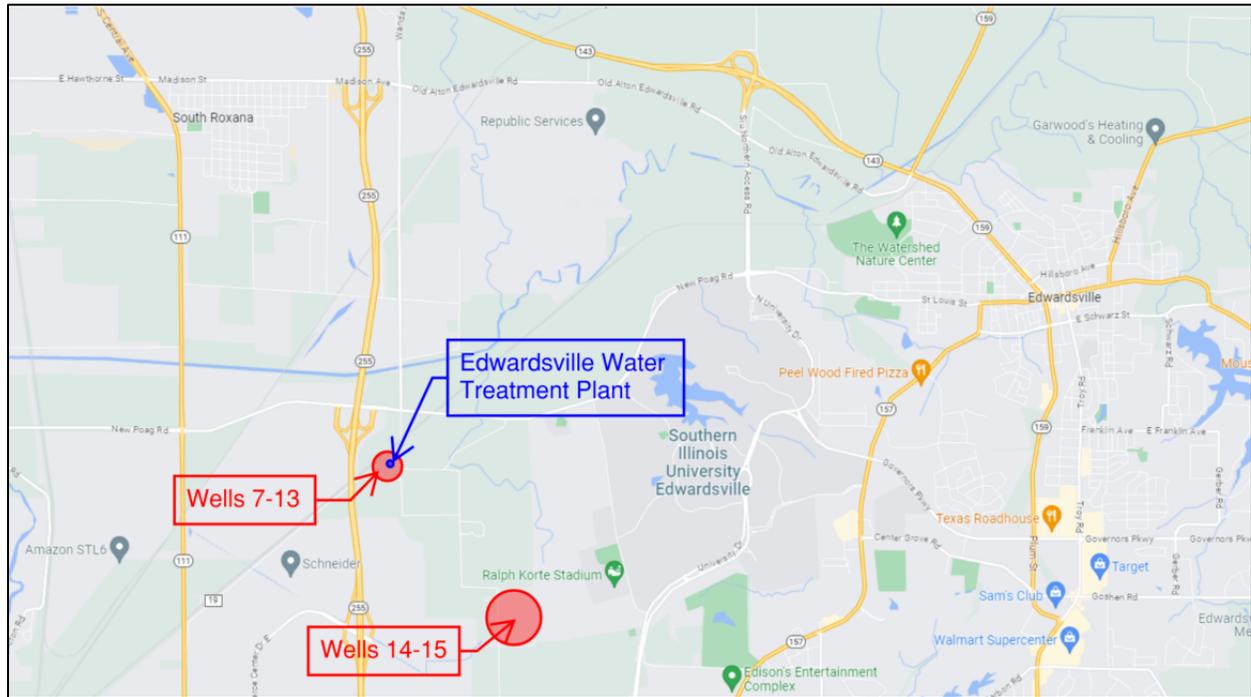


Exhibit C. Approximate Well Locations



2.03 Source Water Quality

LOCAL SOURCE WATER QUALITY MONITORING

The City of Edwarsville collects raw water samples on a daily basis for quality control purposes. In addition, the IEPA requires sampling for certain contaminants at regular intervals. Table 1 shows the contaminants and their schedule. In addition, the IEPA has mandated the City test for Polyfluoro-alkyl Substances (PFAS) on a quarterly basis. Testing is performed by Pace Analytical, LLC in Peoria, IL, a certified laboratory. The most recent quarterly raw water testing was completed on June 1, 2023. A certified Laboratory Report dated June 1, 2023, is included as Appendix D. Lab results from PFAS testing collected so far in 2022-23 at Wells 7 through 15 and at the water treatment plant (WTP) can be seen in Table 2 Water Quality – PFAS.

Table 1. Water Sampling Schedule

Location	Parameters	Frequency
Wells	E. Coli	1x Monthly
Finished Water	Coliform Total	1x Monthly
TP01 (Raw Water)	Fluoride	1x Monthly
TP01 (Raw Water)	Nitrate	1x Yearly
Distribution	Stage 2 DBPR Subpart V	2x Yearly
Distribution	Lead and Copper	30x Every 3 Years
TP01 (Raw Water)	Vinyl Chloride, Corrosion Control Group, IOC, VOC, and Nitrite	1x Every 3 Years
TP01 (Raw Water)	SOC	2x Every 3 Years
TP01 (Raw Water)	RAD_WO_U	1x Every 6 Years

Table 2. Water Quality – PFAS

Analyte	Concentration - parts per trillion (ppt)					
	Aug. 2022		Feb.-Mar. 2023		June 2023	
	WTP	Wells 7-15	WTP	Wells 7-15 (excluding #14)	WTP	Wells 7-15 (excluding #14)
Perfluorobutanesulfonic acid (PFBS)	<2.0	5.9	4.3	8.9	3.5	8.2
Perfluoroheptanoic acid (PFHpA)	<2.0	2.6	<2.0	<2.0	<2.0	<2.0
Perfluorohexanesulfonic acid (PFHxS)	<2.0	3.8	<2.0	2.4	<2.0	3.5
Perfluorononanoic acid (PFNA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctanesulfonic acid (PFOS)	<2.0	3.4	<2.0	<2.0	<2.0	<2.0
Perfluorooctanoic acid (PFOA)	<2.0	4.9	<2.0	2.6	<2.0	2.3
Perfluorodecanoic acid (PFDA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorododecanoic acid (PFDOA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorohexanoic acid (PFHxA)	<2.0	4.3	2.5	3.8	<2.0	3.9
Perfluorotetradecanoic acid (PFTeDA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluorotridecanoic acid (PFTrDA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Perfluoroundecanoic acid (PFUNA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-ethyl Perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
N-methyl Perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

Bold text indicates measured values above the Minimum Reporting Level

STATE SOURCE WATER QUALITY MONITORING

The Illinois Environment Protection Agency (IEPA) collects groundwater quality data for American Bottoms Alluvial Aquifer once a year.

2.04 Finished Water Quality

The US EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. To confirm that tap water meets those regulations, water samples are regularly submitted for laboratory analysis. In 2022, as in past years, Edwardsville's water met EPA and State of Illinois drinking water health standards. No water quality standards violations were reported. Edwardsville performs quarterly finished water quality sampling and testing. The most recent finished water quality testing was completed on June 1, 2023, at the WTP. Testing was performed by Pace Analytical, LLC in Peoria, IL. A certified Laboratory Report dated June 1, 2023, is included as Appendix D. Lab results from PFAS testing

of well water and treatment plant samples collected so far in 2021-23 can be seen in Table 2 Water Quality – PFAS.

2.05 Potential Source Water Contamination Sources

A primary source of potential contamination for Edwardsville is railroad accidents or spills from the nearby Phillips 66 refinery located roughly 5 miles NNW from the plant. While Edwardsville's wells are located south of the water treatment plant, they are near a major railroad spur of Norfolk Southern Railway.

Another source of potential contamination could be from a single point source that would percolate to the aquifer. These point sources could be from nearby farm fields or other adjacent land uses. Exhibit C, above, shows the approximate location of Edwardsville's wells in relation to the adjacent farm fields.

2.06 Susceptibility to Contamination

IEPA considers shallow groundwater sources of community water supply to be susceptible to potential pollution problems. This is based on its proximity to multiple potential sources of groundwater contamination including the Phillips 66 refinery, Norfolk Southern Railway, trash services, and other aquifer users upstream from the wells. Additionally, the land use within the recharge areas of the wells is mixed and includes residential, commercial, and agricultural properties, further contributing to its susceptibility.

Short-term fluctuations and longer-term changes in aquifer water levels can impact water quality and treatment at Edwardsville's water treatment plant. In addition, Edwardsville recognizes its potential susceptibility to emerging contaminants that are not yet regulated, such as micro-plastics, pharmaceuticals, and per- and polyfluoroalkyl substances (PFAS).

2.07 Existing Source Water Protection

The following measures have been taken by Edwardsville and other stakeholders to protect the community water supply wells as a water source:

STRATEGIC WELL LOCATION, DESIGN, AND INSPECTION

Edwardsville selected strategic locations for its water wells and designed them in a way that helps protect the raw water quality. The wells are located near the Water Treatment Plant to reduce the length of the collection pipes required to bring the raw water to the plant. The well locations are also purposely located away from high-traffic roadways to aid in confidentiality to prevent intentional contamination. Using the American Bottoms Alluvial Aquifer as a water source and the spacing of the wells ensures a sufficient yield of water and minimizes interference between the wells' cones of influence, respectively. Yearly averaged well drawdown data from 2013 to 2022 can be found in Appendix C.

Nine wells provide redundancy for well rotation should water quality or structural issues render any one of the wells temporarily unusable. In addition, the capacity of Edwardsville's well structures, pumping, and infrastructure are designed to be significantly higher than historical or projected maximum daily demand for the water treatment plant to provide redundancy.

SECURITY PROTOCOLS

Edwardsville Public Works Department is diligent in the security measures it takes to protect the City's critical water infrastructure including its WTP and wellfields. The WTP plant is controlled 24/7 with personnel

present from 6am-4pm daily. An 8-foot tall, chain link fence with barbed wire surrounds the WTP and the West Well Field as well as an area of protection of 100-150 feet on all sides of the East Well Field.

FILTER BACKWASH WATER

Edwardsville's filter backwash water is discharged to a dedicated set of basins bedded with sandy soil that allows for settling. This discharge method acts as a recharge area for the wells due to the rapid percolation rate for the backwash water and retains the minimal solids in the backwash waste discharge.

WATER QUALITY MONITORING AND ALERTS

Water Plant Operators also monitor well conditions such as water level and capacity and adjust treatment as needed. Edwardsville also receives and provides communication alerts with its neighboring water suppliers who treat water from American Bottoms Alluvial Aquifer to alert each other of unusual water quality.

Regular water quality monitoring not only raises awareness of any needs for short-term adjustment of treatment but can also indicate trends that help inform source water protection planning over time.

MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT

Edwardsville, in partnership with Madison County, complies with requirements of the General Stormwater Permit for Municipal Separate Storm Sewer Systems (MS4). The permit requires holders to develop a stormwater management program of best management practices and measurable goals for several stormwater control initiatives. The City posts its annual permit on its website at the CityofEdwardsville.com.

PRO-ACTIVE WATER EFFICIENCY

Edwardsville Public Works Department is committed to reducing unnecessary water waste related to water loss and non-revenue water in its system to improve water efficiency. These pro-active activities demonstrate Edwardsville's commitment to being a good steward of its source water. Edwardsville has been actively replacing old watermains to reduce water loss, and the City is in the middle of a multi-phase project to install smart meters. These meters will be able to monitor and alert customers of steady usage, which can indicate a leak. These smart meters will not only reduce water loss but have the potential to lower customers' bills as well. These capital improvement investments made over the past ten years can be found in Appendix A.

STORMWATER MANAGEMENT

Edwardsville actively participates with the Mason County Stormwater Commission through its Co-Permittee group, which is developing a county-wide Stormwater Management Plan to protect water quality and reduce the discharge of pollutants into surface water bodies. This Co-Permittee group has been in compliance with the MS4 program since its inception in 2003. Since then, significant progress has been made in following best management practices throughout the County.

PARTICIPATION IN PROFESSIONAL ORGANIZATIONS

Edwardsville Public Works Department actively participates in the Rural Water Association, an organization dedicated to training, supporting, and promoting water and wastewater professionals in small cities around the U.S. In addition, several staff members actively participate in the American Water Works Association (AWWA) and American Public Works Association (APWA).

Part 3. Objectives

Based on the potential sources of contamination and analysis of susceptibility identified in the Source Water Assessment, Edwardsville identified and created the following SWPP objectives. These objectives are intended to represent and support Edwardsville ongoing and newly created source water protection activities:

1. Continue to monitor and improve water quality and quantity.
2. Increase or strengthen source water protection initiatives and strategic investments.
3. Enhance communications and build partnerships in support of source water protection.

(Rest of page left blank intentionally)

Part 4. Action Plan

4.01 Action Plan Activities

To meet its SWPP objectives, Edwardsville will continue its current initiatives (as described in Part 2.07 of this SWPP), as well as implement the following new, strategic projects, programs, and activities. These new activities are organized by the Objective they help to support.

OBJECTIVE #1: CONTINUE TO MONITOR AND IMPROVE WATER QUALITY AND QUANTITY

- Edwardsville will continue to follow federal and state requirements related to testing for emerging contaminants, as well as any future regulations.
- The Public Works Department will continue to implement capital watermain replacement programs and smart meter installations to decrease nonrevenue water in the system.
- Edwardsville will monitor agricultural activities near its WTP and wellfields. Where a need is identified, the City will explore options for implementing additional buffer zones to provide protection from chemical overspray such as pesticides and herbicides.

OBJECTIVE #2: INCREASE OR STRENGTHEN SOURCE WATER PROTECTION INITIATIVES AND STRATEGIC INVESTMENTS

- The Public Works Department will be adding additional security by installing cameras at all of its wellfields, as well as at the WTP.
- As Edwardsville continues to make improvements to its WTP, it will explore opportunities such as installing vegetation and trees, or a retaining wall to further protect its critical infrastructure from nearby railroad activity.
- To continue to minimize noncompatible land uses within its protection zones, the City will continue to explore opportunities for nearby property acquisition to create a protection area for security and water quality purposes.
- Edwardsville will coordinate across city departments to ensure the City's Community Comprehensive Plan aligns land use and zoning with its source water protection efforts.

OBJECTIVE #3: ENHANCE COMMUNICATIONS AND BUILD PARTNERSHIPS IN SUPPORT OF SOURCE WATER PROTECTION

- The Public Works Department will reach out and develop a more established relationship with specific, local land users and upstream aquifer dischargers in order to increase coordination and communication efforts related to source water protection. These stakeholders will include the Norfolk Southern Railway, Phillips 66 refinery, IDOT, and Republic Trash Service. These efforts help to educate stakeholders about source water protection and ensure timely communications in the event of emergencies.
- Edwardsville will engage with the Madison County Soil and Water Conservation District to develop relationship with them and local agriculture in order to share best practices and knowledge related to herbicides, pesticides, and chemical use and its possible impacts on the local aquifer (the drinking water source for Edwardsville).

- Edwardsville will be launching new initiatives to engage, educate, and communicate with its community and residents on the quality and value of its drinking water, and increase support for source water protection initiatives. These efforts will include the following:
 - The City will be joining USEPA as a WaterSense community partner, which will enable Edwardsville to use existing water efficiency educational materials both on its website, as well as in utility communications and at local community institutions such as the library and City Hall.
 - Edwardsville is currently updating its website, and it will be refreshing its water and Public Works Department pages to include additional information and resources for residents including free videos about water, information about checking for leaks, USEPA WaterSense resources, and more.
 - The City will also explore the opportunity to partner with the library and Watershed Nature Center in displaying engaging information about water, and potentially hosting a children's art contest that celebrates water in partnership with a local no-profit arts center.

4.02 Schedule for Implementing Projects, Programs, and Activities

The scheduled timeline for implementation of the new activities is presented in Table 3, which also outlines potential partners and funding sources for each activity.

Table 3. New Source Water Protection Plan Activities Schedule

New Activity	Potential Partners	Funding Source(s)	Timeframe
<i>Continue to comply with requirements and regulations related to emerging contaminants</i>	IEPA	Municipal/Utility	Ongoing
<i>Continue to address water loss/non-revenue water (including watermain and smart meter replacement)</i>	Veolia	Municipal/Utility	Ongoing
<i>Monitor and identify buffer zone needs related to agricultural activities in the future</i>	City planners, Agricultural stakeholders	Municipal/Utility	Ongoing
<i>Install security cameras at WTP and wellfields</i>	Veolia	Municipal/Utility	2024-2027
<i>Explore options for further protection from nearby railroad activity</i>	Veolia, Railroad	Municipal/Utility	2025-2026

New Activity	Potential Partners	Funding Source(s)	Timeframe
<i>Explore opportunities for nearby property acquisition</i>	City officials and planners	Municipal/Utility	Ongoing
<i>Align Community Comprehensive Plan with SWP efforts</i>	City planners and zoning officers	Municipal/Utility	2024
<i>Establish relationships and increase coordination and communication efforts with specific land users and upstream aquifer dischargers</i>	Railroad, Refinery, IDOT, Republic Trash Service, etc.	Municipal/Utility	Ongoing
<i>Engage with local agriculture industry about SWP</i>	Madison County Soil and Water Conservation District	Municipal/Utility	2027
<i>Become USEPA WaterSense community partner</i>	Mayor's office and Communications staff	Municipal/Utility	2024
<i>Update City website to include more SWP and water efficiency information and resources</i>	Mayor's office and Communications staff	Municipal/Utility	2024-2025
<i>Partner with local groups on water education through engaging materials and activities</i>	Mayor's office and Communications staff, Library, local Arts Center, etc.	Municipal/Utility, partner organizations	2026-2028

Appendix B in this SWPP contains a table outlining Edwardsville's existing and new source water protection activities.

4.03 Identification of Necessary Resources to Implement the Plan

The following outlines sources of funding Edwardsville intends to pursue for the new source water protection activities that require funding resources. These funding sources are also outlined in Table 3 from Part 4.02.

- Most costs associated with new SWP activities will be included within the Public Work's municipal capital improvement budget including:
 - Emerging contaminant needs
 - Water loss/non-revenue water capital improvement projects
 - Monitoring and establishing agricultural buffer zones
 - Security camera installations
 - Exploring railroad protection measures

- Establishing relationships with specific land users and upstream aquifer dischargers
- Engaging with local agriculture industry about SWP
- Any costs for implementing the following SWP activities will be included in Edwardsville's general budget:
 - Property acquisition activities
 - Community Comprehensive Plan alignment with SWP efforts
 - Becoming a USEPA WaterSense community partner
 - Updating the City website to include more water information and resources
 - Partnering with local groups on water education through engaging materials and activities

In addition to funding resources, Public Works has identified and begun (or continued) to develop relationships with key stakeholders in order to support the activities of this source water protection plan. These partnerships strengthen and enable a more holistic approach to source water protection and provide additional resources necessary for implementation. Current and future partners include:

- Other City departments within Edwardsville including:
 - City Mayor's Office
 - Communications
 - Land Use Planners and Zoning Officers
- Regional Stakeholder groups including:
 - Madison County Stormwater Commission
 - Madison County Soil and Water Conservation District
 - Local community groups and institutions such as the library, local Arts Center, and potentially the Watershed Nature Center and School District

4.04 Identification of Potential Problems and Obstacles for Implementation

An obstacle to achieving any plan is funding availability. Edwardsville, in concert with its Public Works Department, Veolia team, other City departments and staff, and outside partners, has been and will continue to work diligently to secure municipal budget allocations and grant funding necessary to implement the activities in this SWPP.

As identified in the source water assessment, another obstacle to achieving successful implementation is the lack of direct control Edwardsville has over the aquifer as a whole. This includes activities of other communities, landowners, and upstream dischargers within the watershed, including industrial production and agricultural use around Edwardsville's wells. That is why Public Works is committed to developing communication channels and collaborations with key partners such as the railroad, refinery, IDOT, and local waste management industries, as well the Soil and Water Conservation District to coordinate on protection of Edwardsville's source water.

Part 5. Appendices

5.01 Appendix A: Capital Improvement Projects (CIPs) Completed in Past 10 Years

Water CIPs	Year
Grand Avenue Water Main Replacement	2014
4th Avenue Water Main Replacement	2015
Booster Station #1 Upgrades and New 1MG Tank	2016
South Buchanan Street Water Main Replacement	2017
Quince Street Water Main Replacement	2017
3rd Avenue Water Main Replacement	2017
St. Louis Street Water Main Replacement	2018
Hale Avenue Water Main Replacement	2019
5th Avenue Water Main Replacement	2019
Grant Drive Water Main Replacement	2021
SIUE Well Field Security Improvements	2021
Rock Hill Court Water Main Replacement	2021
Booster Station #2 Tank Rehabilitation	2022
West Dunn Street Water Main Replacement	2022
Chapman Street Water Main Replacement	2022
North Buchanan Street Water Main Replacement	2023
North Kansas Street Water Main Replacement	2023
South Charles Street Water Main Replacement	2023
Second Street Water Main Replacement	2023
East High Street Water Main Replacement	2023
Water Meter Replacement and Remote Metering Installation	2023

5.02 Appendix B: Current and Future Activities by SWPP Objective

Objective	SWPP Activity
Objective #1: Continue to monitor and improve water quality and quantity	
	Water Quality Monitoring and Alerts
	Municipal Separate Storm Sewer System Permit
	Pro-Active Water Efficiency
	Stormwater Management
*	Comply with emerging contaminants requirements
*	Address water loss/non-revenue water
*	Monitor and identify buffer zone needs related to agricultural activities in the future
Objective #2: Increase or strengthen SWP initiatives and strategic investments	
	Strategic well location, design, and Inspection
	Filter Backwash Water
	Continue current security protocols
*	Install security cameras at WTP and wellfields
*	Explore options for further protection from nearby railroad activity
*	Explore opportunities for nearby property acquisition
*	Align Community Comprehensive Plan with SWP efforts
Objective #3: Enhance communications and build partnerships in support of SWP	
	Participation in Professional Organizations
*	Increase coordination and communication efforts with specific, local land users and upstream dischargers
*	Engage with local agriculture industry about SWP
*	Become USEPA WaterSense community partner
*	Update City website with SWP information and education
*	Partner with local community groups on water education and activity opportunities

* Denotes new activity

5.03 Appendix C: Well Testing Results

Table C-1. Yearly Averaged Well Drawdown Data

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Well 7	Static (ft)	33.7	33.2	30.4	26.9	28.5	29.6	26.1	24.5	24.4	26.6
	Pumping (ft)	52.3	53.8	47.2	43.8	44.1	50.1	43.7	38.8	38.1	41.4
	Drawdown (ft)	18.6	20.6	16.9	16.9	15.6	20.6	17.6	14.3	13.8	14.8
	Discharge (GPM)*	1065	790		1360	1262	1321	1338	1174	1139	1280
	Discharge Pressure (psi)	26	33	24	26	27	26	22	34	32	30
Well 8	Static (ft)	33.1	32.2	30.4	26.7	27.9	29.1	25.3	25.2	24.0	26.8
	Pumping (ft)	45.3	43.3	44.8	41.2	41.4	46.0	42.5	37.2	35.5	39.3
	Drawdown (ft)	12.2	11.1	14.5	14.5	13.5	16.9	17.1	12.0	11.5	12.5
	Discharge (GPM)*	1045	940		1021	1005	954	1145	915	593	1021
	Discharge Pressure (psi)	26	30	31	32	32	31	44	38	36	36
Well 9	Static (ft)	35.3	35.1	33.1	29.5	30.9	32.0	27.9	26.6	26.9	28.2
	Pumping (ft)	51.5	46.0	43.2	43.8	49.4	47.0	43.5	41.8	40.3	40.5
	Drawdown (ft)	16.2	10.9	10.1	14.3	18.5	15.0	15.6	15.2	13.4	12.3
	Discharge (GPM)*	1170	1000		1397	1355	1413	1564	1565	1544	1497
	Discharge Pressure (psi)	24	23	23	25	22	21	26	27	27	31
Well 10	Static (ft)	35.0	34.9	33.3	29.4	31.0	31.6	28.2	27.2	27.3	28.1
	Pumping (ft)	47.1	44.0	42.9	40.5	44.1	46.0	39.2	36.1	37.1	39.8
	Drawdown (ft)	12.0	9.1	9.7	11.1	13.1	14.4	11.0	9.0	9.8	11.7
	Discharge (GPM)*	918	687		1067	1266	1353	1126	990	982	982
	Discharge Pressure (psi)	27	27	23	32	28	32	33	33	35	29
Well 11	Static (ft)	34.2	34.3	32.5	28.4	30.4	31.0	26.8	26.0	25.8	27.5
	Pumping (ft)	48.9	44.4	41.1	38.5	40.2	41.2	35.6	33.9	34.3	36.9
	Drawdown (ft)	14.7	10.2	8.7	10.1	9.9	10.2	8.8	8.0	8.5	9.4
	Discharge (GPM)*	1142	980		1002	1096	1108	973	861	847	822
	Discharge Pressure (psi)	24	32	27	27	30	31	31	40	39	35
Well 12	Static (ft)	35.2	34.5	33.0	28.6	30.3	31.3	27.0	25.3	26.6	27.0
	Pumping (ft)	47.0	45.5	44.4	43.2	42.8	47.6	40.0	39.5	43.8	42.2
	Drawdown (ft)	11.8	11.0	11.4	14.5	12.5	16.3	13.0	14.3	17.3	15.2
	Discharge (GPM)*	1198	975		1144	1109	1217	1094	1061	1450	1413
	Discharge Pressure (psi)	25	25	25	26	27	27	27	27	29	33

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Well 13	Static (ft)	34.2	34.0	31.6	28.5	29.8	31.2	27.0	25.9	25.8	27.7
	Pumping (ft)	45.8	43.1	42.6	41.7	44.2	48.1	47.8	41.8	41.9	44.2
	Drawdown (ft)	11.6	9.1	10.9	13.1	14.4	16.9	20.7	15.9	16.0	16.5
	Discharge (GPM)*	1098	875		1324	1427	1493	1416	1563	1584	1575
	Discharge Pressure (psi)	23	21	21	23	21	20	20	25	25	24
Well 14	Static (ft)	20.5	19.0	16.2	14.4	14.0	19.6	16.8	14.0	13.3	16.0
	Pumping (ft)	38.5	36.6	33.4	33.4	32.9	37.7	32.1	37.1	37.3	38.8
	Drawdown (ft)	18.0	16.3	17.2	19.0	18.9	18.1	15.3	23.0	24.0	22.8
	Discharge (GPM)	1508	1613	817	1524	1330	1526	1651	1576	1517	1422
	Discharge Pressure (psi)	22	23	24	26	30	30	32	24	28	28
Well 15	Static (ft)	18.1	16.7	13.7	12.8	11.9	17.4	14.1	10.7	10.8	12.9
	Pumping (ft)	36.3	34.2	29.1	32.6	30.5	37.0	35.9	35.8	32.1	30.4
	Drawdown (ft)	18.3	17.5	15.3	19.8	18.5	19.7	21.8	25.1	21.3	17.5
	Discharge (GPM)	1541	1538	616	1350	1277	1596	1608	1499	1287	1061
	Discharge Pressure (psi)	26	21	25	26	31	33	34	35	28	27

*Blank cells indicate that not enough data was available to calculate the average of that year

The following figures represent data from Table C-1. The irregular low point on year 2015 is the result of the lack of data available for averaging.

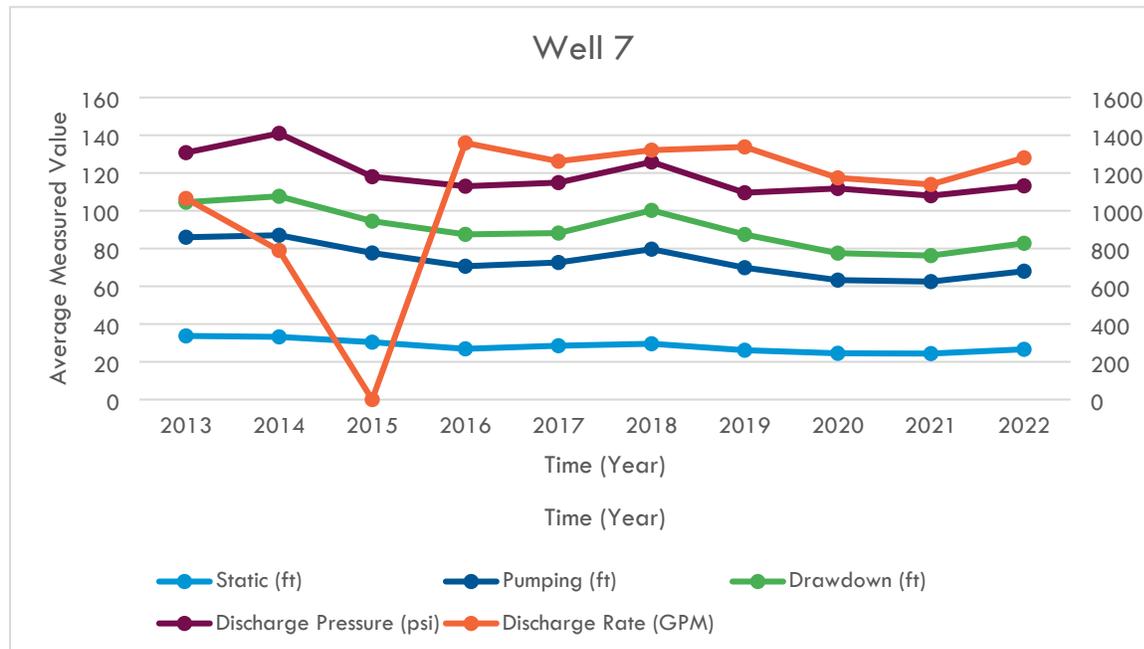


Figure C-1. Yearly Averaged Well Drawdown Data for Well 7

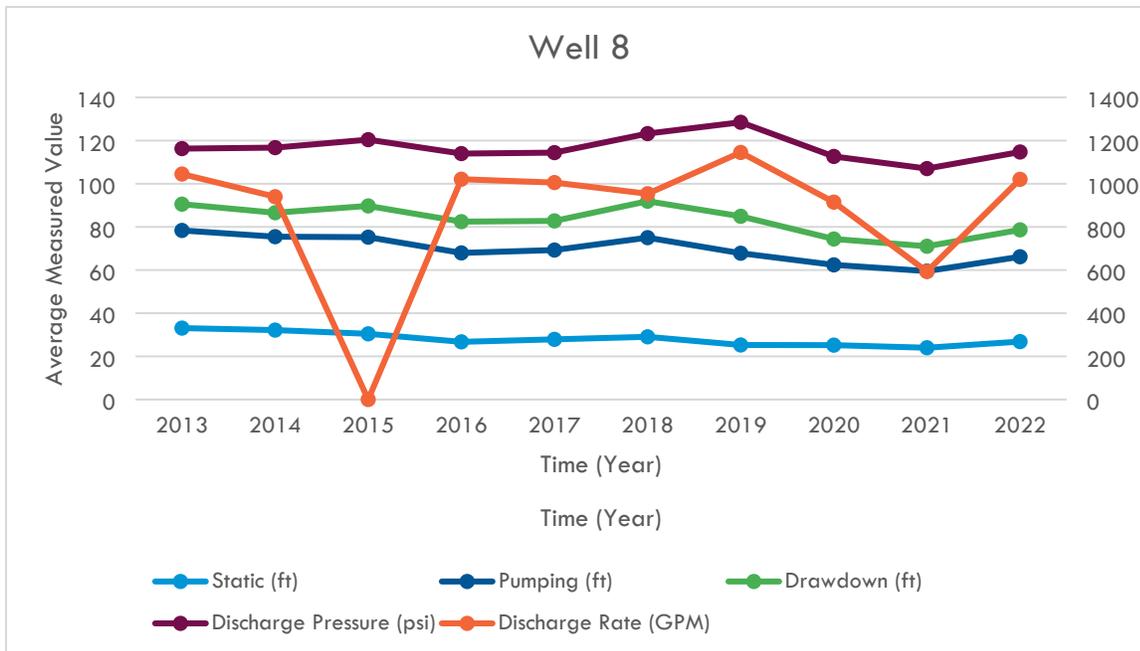


Figure C-2. Yearly Averaged Well Drawdown Data for Well 8

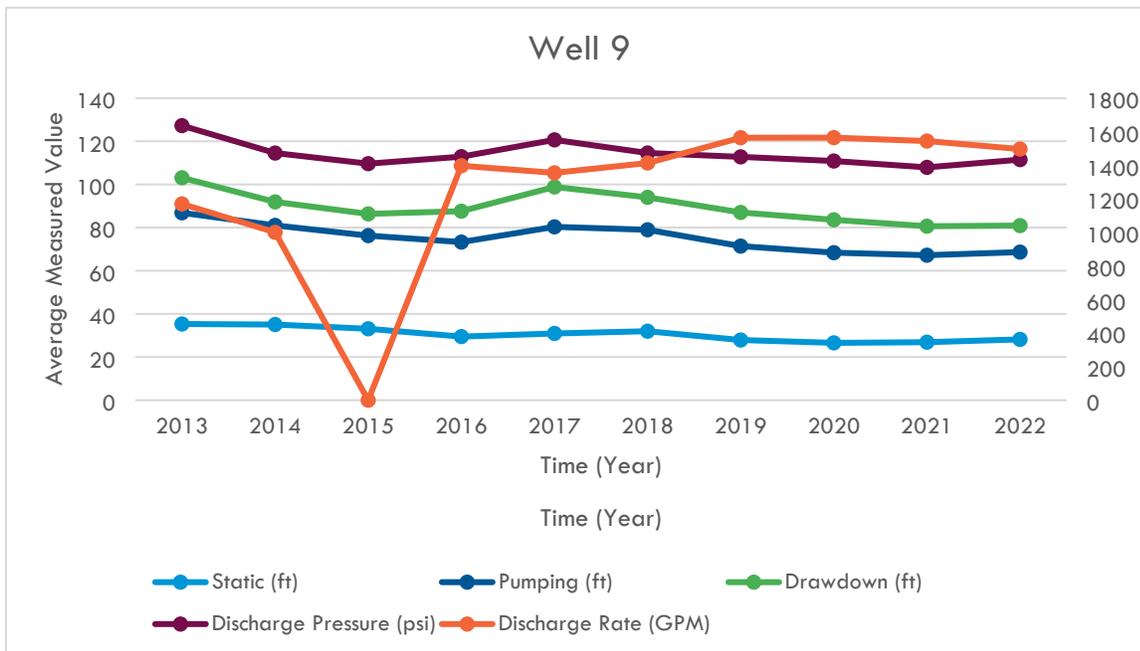


Figure C-3. Yearly Averaged Well Drawdown Data for Well 9

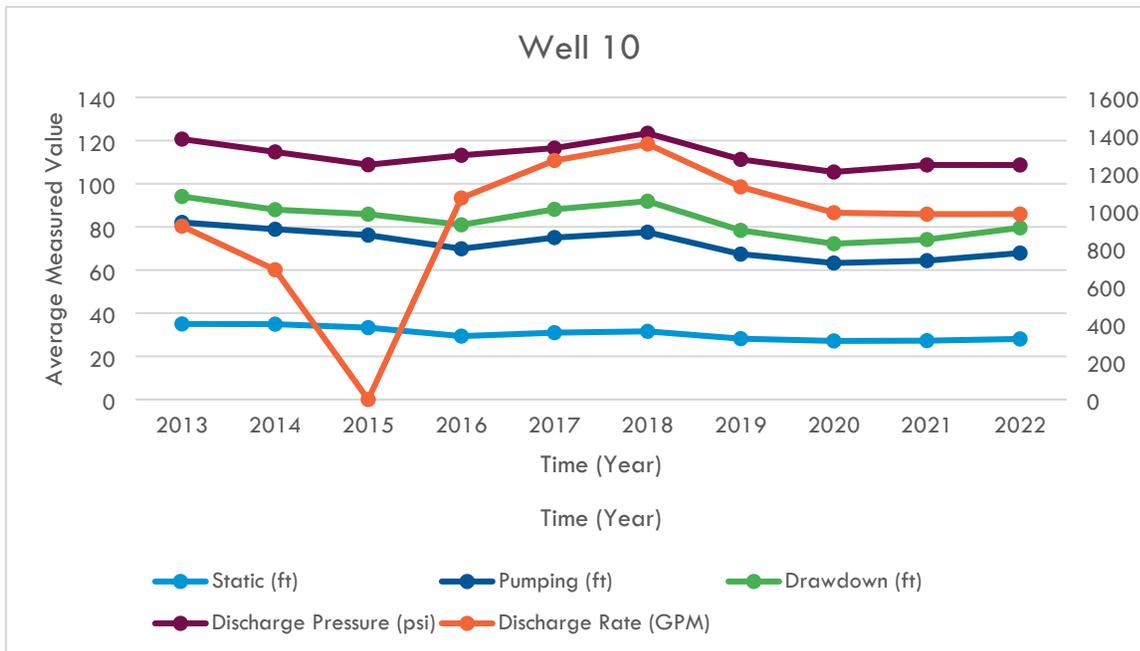


Figure C-4. Yearly Averaged Well Drawdown Data for Well 10

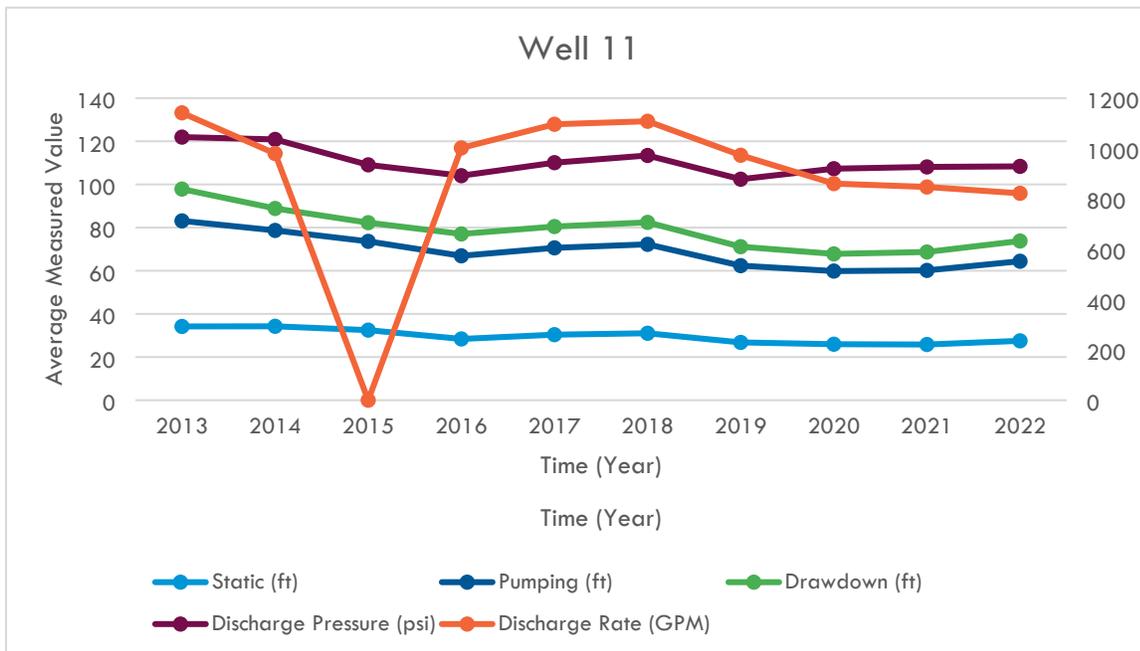


Figure C-5. Yearly Averaged Well Drawdown Data for Well 11

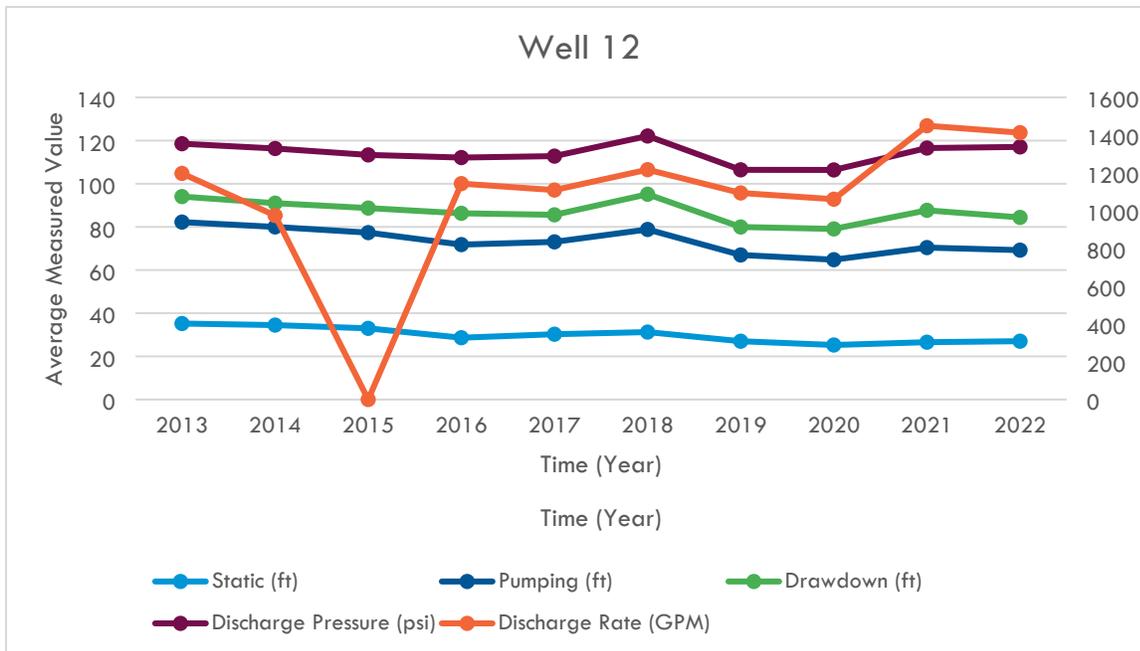


Figure C-6. Yearly Averaged Well Drawdown Data for Well 12

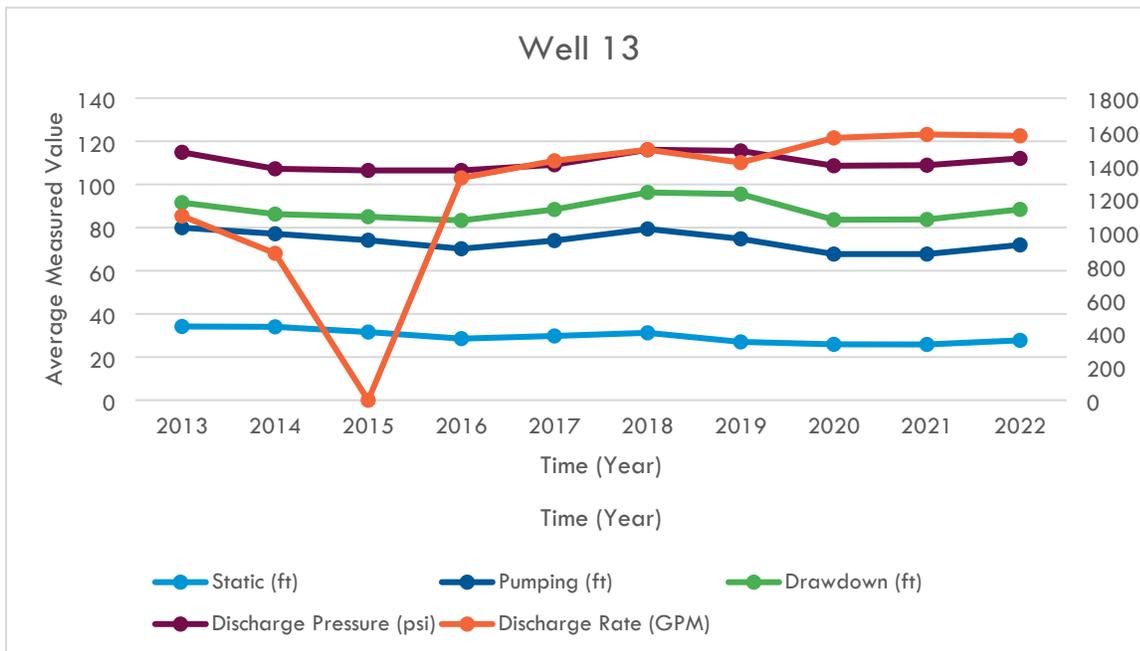


Figure C-7. Yearly Averaged Well Drawdown Data for Well 13

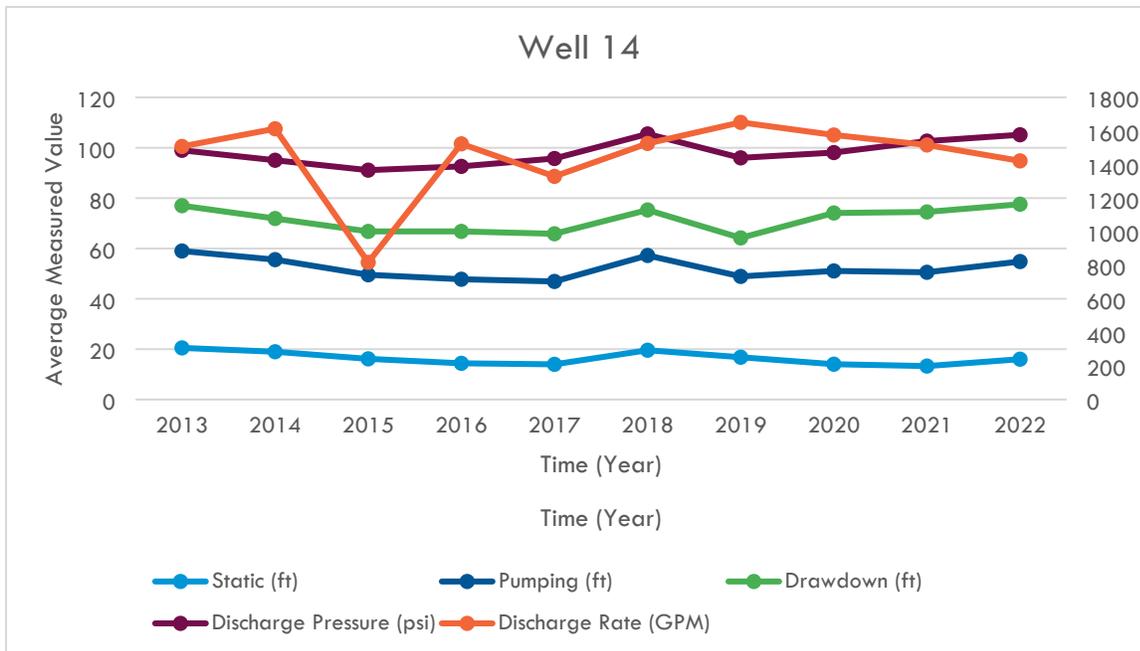


Figure C-8. Yearly Averaged Well Drawdown Data for Well 14

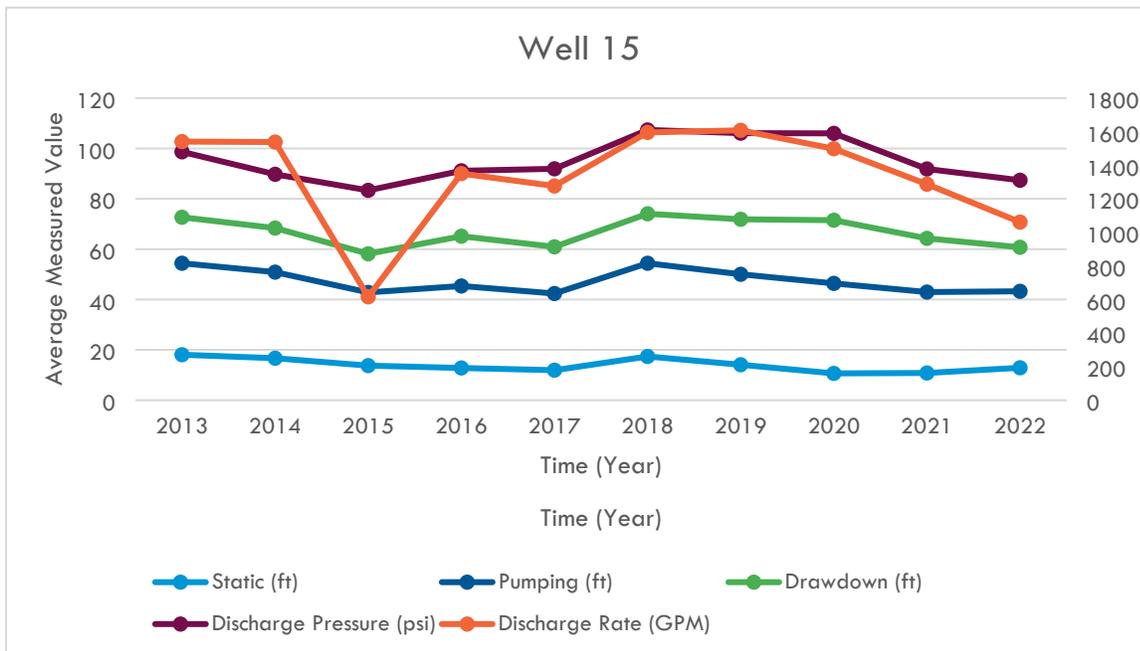


Figure C-9. Yearly Averaged Well Drawdown Data for Well 15

5.04 Appendix D: Certified Laboratory Reports dated June 1, 2023



Pace Analytical Services, LLC
2231 W. Altorfer Drive
Peoria, IL 61615
(800)752-6651

June 16, 2023

Mr Mike Jones
Veolia Water North America - Edwardsville
3900 Wanda Road
Edwardsville, IL 62025

RE: IL1190250

Dear Mr Mike Jones:

Please find enclosed the analytical results for the **20** sample(s) the laboratory received on **6/3/23 9:15 am** and logged in under work order **GF00410**. All testing is performed according to our current TNI accreditations unless otherwise noted. This report cannot be reproduced, except in full, without the written permission of Pace Analytical Services, LLC.

If you have any questions regarding your report, please contact your project manager. Quality and timely data is of the utmost importance to us.

Pace Analytical Services appreciates the opportunity to provide you with analytical expertise. We are always trying to improve our customer service and we welcome you to contact the General Manager, Lisa Grant, with any feedback you have about your experience with our laboratory at 309-683-1764 or lisa.grant@pacelabs.com.

A handwritten signature in cursive script that reads "Janet Clutters".

Janet Clutters
Project Manager
(309) 692-9688 x1743
janet.clutters@pacelabs.com



SAMPLE RECEIPT CHECK LIST

Items not applicable will be marked as in compliance

Work Order GF00410

YES	Samples received within temperature compliance when applicable
YES	COC present upon sample receipt
YES	COC completed & legible
YES	Sampler name & signature present
YES	Unique sample IDs assigned
YES	Sample collection location recorded
YES	Date & time collected recorded on COC
YES	Relinquished by client signature on COC
YES	COC & labels match
YES	Sample labels are legible
YES	Appropriate bottle(s) received
YES	Sufficient sample volume received
YES	Sample containers received undamaged
NO	Zero headspace, <6 mm present in VOA vials
NO	Trip blank(s) received
YES	All non-field analyses received within holding times
NO	Short hold time analysis
YES	Current PDC COC submitted
NO	Case narrative provided



ANALYTICAL RESULTS

Sample: GF00410-01
Name: TP01 - WTP
Reg ID: IL1190250

Sampled: 06/01/23 11:00
Received: 06/03/23 09:15
Matrix: Drinking Water - Regular Sample
PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFBS	3.5	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFNA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFDaA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFTrDA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:33	PSB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-02

Name: FB TP01

Reg ID: IL1190250

Sampled: 06/01/23 11:00

Received: 06/03/23 09:15

Matrix: Drinking Water - Field Blank

PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFNA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFTrDA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/08/23 11:51	1	2.0	06/09/23 14:55	PSB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-03
Name: WL00334 - WELL 9-APPROX 200 FT
Reg ID: IL1190250

Sampled: 06/01/23 09:15
Received: 06/03/23 09:15
Matrix: Drinking Water - Regular Sample
PO #: 1000146047

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Semivolatile Organics - PFAS - PIA with various compounds like PFOA, PFOS, PFBS, etc.



ANALYTICAL RESULTS

Sample: GF00410-05
Name: WL01133 - WELL 10 IS 1350 FT S
Reg ID: IL1190250

Sampled: 06/01/23 08:45
Received: 06/03/23 09:15
Matrix: Drinking Water - Regular Sample
PO #: 1000146047

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Semivolatile Organics - PFAS - PIA with various chemical names like PFOA, PFOS, PFBS, etc.



ANALYTICAL RESULTS

Sample: GF00410-06

Name: FB WL01133

Reg ID: IL1190250

Sampled: 06/01/23 08:45

Received: 06/03/23 09:15

Matrix: Drinking Water - Field Blank

PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFNA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFTTrDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:10	DJB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-07
Name: WL01134 - WELL 11 IS 130 FT NO
Reg ID: IL1190250

Sampled: 06/01/23 09:30
Received: 06/03/23 09:15
Matrix: Drinking Water - Regular Sample
PO #: 1000146047

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Semivolatile Organics - PFAS - PIA with various chemical names like PFOA, PFOS, PFBS, etc.



ANALYTICAL RESULTS

Sample: GF00410-08

Name: FB WL01134

Reg ID: IL1190250

Sampled: 06/01/23 09:30

Received: 06/03/23 09:15

Matrix: Drinking Water - Field Blank

PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFNA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFTTrDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 12:37	DJB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-09
Name: WL01212 - WELL 12 IS 150 FT EA
Reg ID: IL1190250

Sampled: 06/01/23 09:00
Received: 06/03/23 09:15
Matrix: Drinking Water - Regular Sample
PO #: 1000146047

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Semivolatile Organics - PFAS - PIA with various chemical names like PFOA, PFOS, PFBS, etc.



ANALYTICAL RESULTS

Sample: GF00410-10

Name: FB WL01212

Reg ID: IL1190250

Sampled: 06/01/23 09:00

Received: 06/03/23 09:15

Matrix: Drinking Water - Field Blank

PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFNA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFTrDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:04	DJB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-11
 Name: WL01213 - WELL 13 IS 200 FT SO
 Reg ID: IL1190250

Sampled: 06/01/23 08:15
 Received: 06/03/23 09:15
 Matrix: Drinking Water - Regular Sample
 PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatiles Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFBS	2.2	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFNA	< 2.0	ng/L	C2	06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFTTrDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:27	PSB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-12

Name: FB WL01213

Reg ID: IL1190250

Sampled: 06/01/23 08:15

Received: 06/03/23 09:15

Matrix: Drinking Water - Field Blank

PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFNA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFTTrDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:31	DJB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-13
 Name: WL01886 - WELL 14 (1886)
 Reg ID: IL1190250

Sampled: 06/01/23 10:15
 Received: 06/03/23 09:15
 Matrix: Drinking Water - Regular Sample
 PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	6.7	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFBS	4.6	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFHpA	2.5	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFNA	< 2.0	ng/L	C2	06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFHxA	4.7	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFTrDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 16:49	PSB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-14
 Name: FB WL01886
 Reg ID: IL1190250

Sampled: 06/01/23 10:15
 Received: 06/03/23 09:15
 Matrix: Drinking Water - Field Blank
 PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFNA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFTTrDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
9CI-PF3ONS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
11CI-PF3OUdS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 13:58	DJB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-15
 Name: WL01888 - WELL 15 (01888)
 Reg ID: IL1190250

Sampled: 06/01/23 10:30
 Received: 06/03/23 09:15
 Matrix: Drinking Water - Regular Sample
 PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFNA	< 2.0	ng/L	C2	06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFTTrDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 17:10	PSB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-17
Name: WL60064 - WELL 7-APPROX 400 FT
Reg ID: IL1190250

Sampled: 06/01/23 08:00
Received: 06/03/23 09:15
Matrix: Drinking Water - Regular Sample
PO #: 1000146047

Table with 10 columns: Parameter, Result, Unit, Qualifier, Prepared, Dilution, MRL, Analyzed, Analyst, Method. Rows include Semivolatile Organics - PFAS - PIA with various chemical names like PFOA, PFOS, PFBS, etc.



ANALYTICAL RESULTS

Sample: GF00410-18

Name: FB WL60064

Reg ID: IL1190250

Sampled: 06/01/23 08:00

Received: 06/03/23 09:15

Matrix: Drinking Water - Field Blank

PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFNA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFTTrDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1
PFTeDA	< 2.0	ng/L		06/14/23 11:36	1	2.0	06/15/23 14:25	DJB	EPA 537.1 REV1



ANALYTICAL RESULTS

Sample: GF00410-19
Name: WL60065 - WELL 8-APPROX 300 FT
Reg ID: IL1190250

Sampled: 06/01/23 08:30
Received: 06/03/23 09:15
Matrix: Drinking Water - Regular Sample
PO #: 1000146047

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Semivolatile Organics - PFAS - PIA									
PFOA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFOS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFBS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFHpA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFHxS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFNA	< 2.0	ng/L	C2	06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFHxA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFDoA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFTTrDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFUnA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
NETFOSAA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
NMEFOSAA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
HFPO-DA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
ADONA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
9Cl-PF3ONS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
11Cl-PF3OUdS	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1
PFTTeDA	< 2.0	ng/L		06/13/23 12:12	1	2.0	06/14/23 18:15	PSB	EPA 537.1 REV1



NOTES

Specifications regarding method revisions, method modifications, and calculations used for analysis are available upon request. Please contact your project manager.

* Not a TNI accredited analyte

Certifications

CHI - McHenry, IL - 4314-A W. Crystal Lake Road, McHenry, IL 60050

TNI Accreditation for Drinking Water and Wastewater Fields of Testing through IL EPA Accreditation No. 100279

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17556

PIA - Peoria, IL - 2231 W. Altorfer Drive, Peoria, IL 61615

TNI Accreditation for Drinking Water, Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. 100230

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory Registry No. 17553

Drinking Water Certifications/Accreditations: Iowa (240); Kansas (E-10338); Missouri (870)

Wastewater Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

Solid and Hazardous Material Certifications/Accreditations: Arkansas (88-0677); Iowa (240); Kansas (E-10338)

SPMO - Springfield, MO - 1805 W Sunset Street, Springfield, MO 65807

USEPA DMR-QA Program

STL - Hazelwood, MO - 944 Anglum Rd, Hazelwood, MO 63042

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through KS KDHE Certification No. E-10389

TNI Accreditation for Wastewater, Solid and Hazardous Material Fields of Testing through IL EPA Accreditation No. - 200080

Illinois Department of Public Health Bacterial Analysis in Drinking Water Approved Laboratory, Registry No. 171050

Missouri Department of Natural Resources - Certificate of Approval for Microbiological Laboratory Service - No. 1050

Qualifiers

C2 Acceptance criteria for the Blank Spike (BS) were exceeded high with associated non-detect samples. The associated non-detect results are qualified and reported.



Certified by: Janet Clutters, Project Manager

PDC Laboratories, Inc.
2231 W. Altorfer Dr
Peoria, IL 61615

CHAIN OF CUSTODY RECORD

State where samples were collected IL

Phone: (800) 752-6651

Fax: (309) 692-9689

www.pdclab.com

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT EDWARDSVILLE DEPT. OF PUBLIC WORKS		P.O. NUMBER IL 1190250		PROJECT NAME EDWARDSVILLE PFAS		DATE SHIPPED 6-1-23		3 ANALYSIS REQUESTED PFAS			4 WORK ORDER (FOR LAB USE ONLY)	
ADDRESS 3735 WANDA RD				PHONE (618) 692-7053		EMAIL BILLY.SEITZ@VEOLIA.COM		MEANS SHIPPED FedEx		LOGIN #: _____ LOGGED BY: _____ PROJECT: _____ PROJ MGR: _____		
CITY EDWARDSVILLE		STATE IL	ZIP 62035	SAMPLER (PLEASE PRINT) Matt DeVries		MATRIX TYPES: WW - WASTE WATER DW - DRINKING WATER GW - GROUND WATER WWSL - SLUDGE MAS - SOLID LCHT - LEACHATE OTHER: _____		PFAS M537.1			REMARKS	
CONTACT PERSON BILLY SEITZ				SAMPLER'S SIGNATURE 								
2 SAMPLE DESCRIPTION AS YOU WANT TO REPORT		DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB COMP		MATRIX TYPE	BOTTLE COUNT					
WL01213 - WELL 13 (01213)		6-1-23	0815	X		DW	3	X				
FB WL01213		6-1-23	0815	X		DW	1	X				
WL01886 - WELL 14 (1886)		6-1-23	1015	X		DW	3	X				
FB WL01886		6-1-23	1015	X		DW	1	X				
WL01888 - WELL 15 (01888)		6-1-23	1030	X		DW	3	X				
FB WL01888		6-1-23	1030	X		DW	1	X				
WL60064 - WELL 7 (60064)		6-1-23	0800	X		DW	3	X				
FB WL60064		6-1-23	0800	X		DW	1	X				
WL60065 - WELL 8 (60065)		6-1-23	0830	X		DW	3	X				
FB WL60065		6-1-23	0830	X		DW	1	X				
5 TURNAROUND TIME REQUESTED (RUSH TAT IS SUBJECT TO APPROVAL AND SURCHARGE)			<input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> RUSH		DATE RESULTS NEEDED		6 ATTENTION SAMPLE COLLECTOR: The sample temperature will be measured upon receipt at the lab. Samples must arrive at the lab between the range of 0.1-5.0 degrees C or they will be rejected. Samples collected and received at the lab on the same day on ice will be acceptable.					
7 RELINQUISHED BY (SIGNATURE) 		DATE 6-1-23	TIME 1110	RECEIVED BY (SIGNATURE)		DATE	TIME	8				
RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED BY (SIGNATURE)		DATE	TIME	SAMPLE COLLECTED SAME DAY AS RECEIVED SAMPLE(S) TEMPERATURE UPON RECEIPT CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE PROPER BOTTLES RECEIVED IN GOOD CONDITION BOTTLES FILLED WITH ADEQUATE VOLUME SAMPLE(S) RECEIVED WITHIN HOLD TIME(S) DATE AND TIME TAKEN FROM SAMPLE BOTTLE				
RELINQUISHED BY (SIGNATURE)		DATE	TIME	RECEIVED BY (SIGNATURE) 		DATE 6/2/23	TIME 115	YOR N OR N OR N OR N OR N				

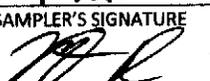
PDC Laboratories, Inc.
2231 W. Altorfer Dr
Peoria, IL 61615

CHAIN OF CUSTODY RECORD

State where samples were collected IL

Phone: (800) 752-6651
Fax: (309) 692-9689
www.pdclab.com

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT EDWARDSVILLE DEPT. OF PUBLIC WORKS		P.O. NUMBER IL1190250		PROJECT NAME EDWARDSVILLE PFAS		DATE SHIPPED 6-1-23		3 ANALYSIS REQUESTED PFAS				4 WORK ORDER (FOR LAB USE ONLY)	
ADDRESS 3735 WANDA RD		PHONE (618) 692-7053		EMAIL BILLY.SEITZ@VEOLIA.COM		MEANS SHIPPED Fed Ex		PFAS M537.1				LOGIN #: _____	
CITY EDWARDSVILLE	STATE IL	ZIP 62035	SAMPLER (PLEASE PRINT) Matt DeVries			MATRIX TYPES: WW - WASTE WATER DW - DRINKING WATER GW - GROUND WATER WWSL - SLUDGE NAS - SOLID LCHT - LEACHATE OTHER:						LOGGED BY: _____	
CONTACT PERSON BILLY SEITZ			SAMPLER'S SIGNATURE 									PROJECT: _____	
2 SAMPLE DESCRIPTION AS YOU WANT TO REPORT		DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	TYPE COMP	MATRIX TYPE	BOTTLE COUNT					REMARKS	
TP01- TREATMENT PLANT		6-1-23	1100	X		DW	3	X					
FB TP01		6-1-23	1100	X		DW	1	X					
WL00334 - WELL 9 (00334)		6-1-23	0915	X		DW	3	X					
FB WL00334		6-1-23	0915	X		DW	1	X					
WL01133 - WELL 10 (01133)		6-1-23	0845	X		DW	3	X					
FB WL01133		6-1-23	0845	X		DW	1	X					
WL01134 - WELL 11 (01134)		6-1-23	0930	X		DW	3	X					
FB WL01134		6-1-23	0930	X		DW	1	X					
WL01212 - WELL 12		6-1-23	0900	X		DW	3	X					
FB WL01212		6-1-23	0900	X		DW	1	X					
5 TURNAROUND TIME REQUESTED (RUSH TAT IS SUBJECT TO APPROVAL AND SURCHARGE) <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> RUSH				DATE RESULTS NEEDED		6 ATTENTION SAMPLE COLLECTOR: The sample temperature will be measured upon receipt at the lab. Samples must arrive at the lab between the range of 0.1-6.0 degrees C or they will be rejected. Samples collected and received at the lab on the same day on ice will be acceptable.							
7 RELINQUISHED BY (SIGNATURE) 		DATE 6-1-23	RECEIVED BY (SIGNATURE)			DATE	8						
		TIME 1110				TIME	SAMPLE COLLECTED SAME DAY AS RECEIVED SAMPLE(S) TEMPERATURE UPON RECEIPT CHILL PROCESS STARTED PRIOR TO RECEIPT SAMPLE(S) RECEIVED ON ICE PROPER BOTTLES RECEIVED IN GOOD CONDITION BOTTLES FILLED WITH ADEQUATE VOLUME SAMPLE(S) RECEIVED WITHIN HOLD TIME(S) DATE AND TIME TAKEN FROM SAMPLE BOTTLE						
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)			DATE							Y OR N
		TIME				TIME							°C
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)			DATE	Y OR N						
		TIME				TIME	Y OR N						
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)			DATE	Y OR N						
		TIME				TIME	Y OR N						

PDC Laboratories, Inc.
 2231 W. Altorfer Dr
 Peoria, IL 61615

CHAIN OF CUSTODY RECORD

State where samples were collected IL

Phone: (800) 752-6651
 Fax: (309) 692-9689
 www.pdclab.com

ALL HIGHLIGHTED AREAS MUST BE COMPLETED BY CLIENT (PLEASE PRINT)

1 CLIENT EDWARDSVILLE DEPT. OF PUBLIC WORKS		P.O. NUMBER IL1190250		PROJECT NAME EDWARDSVILLE PFAS		DATE SHIPPED 6-1-23		3 ANALYSIS REQUESTED PFAS				4 WORK ORDER (FOR LAB USE ONLY)	
ADDRESS 3735 WANDA RD		PHONE (618) 692-7053		EMAIL BILLY.SEITZ@VEOLIA.COM		MEANS SHIPPED FedEx		PFAS M537.1				LOGIN #: _____	
CITY EDWARDSVILLE	STATE IL	ZIP 62035	SAMPLER (PLEASE PRINT) Math DeVries			MATRIX TYPES: WW - WASTE WATER DW - DRINKING WATER GW - GROUND WATER WWSL - SLUDGE NAS - SOLID LCHT - LEACHATE OTHER:						PROJECT: _____	
CONTACT PERSON BILLY SEITZ			SAMPLER'S SIGNATURE 									PROJ MGR: _____	
2 SAMPLE DESCRIPTION AS YOU WANT TO REPORT		DATE COLLECTED	TIME COLLECTED	SAMPLE TYPE GRAB	COMP	MATRIX TYPE	BOTTLE COUNT					REMARKS	
WL01213 - WELL 13 (01213)		6-1-23	0815	X		DW	3	X					
FB WL01213		6-1-23	0815	X		DW	1	X					
WL01886 - WELL 14 (1886)		6-1-23	1015	X		DW	3	X					
FB WL01886		6-1-23	1015	X		DW	1	X					
WL01888 - WELL 15 (01888)		6-1-23	1030	X		DW	3	X					
FB WL01888		6-1-23	1030	X		DW	1	X					
WL60064 - WELL 7 (60064)		6-1-23	0800	X		DW	3	X					
FB WL60064		6-1-23	0800	X		DW	1	X					
WL60065 - WELL 8 (60065)		6-1-23	0830	X		DW	3	X					
FB WL60065		6-1-23	0830	X		DW	1	X					
5 TURNAROUND TIME REQUESTED (RUSH TAT IS SUBJECT TO APPROVAL AND SURCHARGE) <input checked="" type="checkbox"/> NORMAL <input type="checkbox"/> RUSH			DATE RESULTS NEEDED			6 ATTENTION SAMPLE COLLECTOR: The sample temperature will be measured upon receipt at the lab. Samples must arrive at the lab between the range of 0.1-6.0 degrees C or they will be rejected. Samples collected and received at the lab on the same day on ice will be acceptable.							
7 RELINQUISHED BY (SIGNATURE) 		DATE 6-1-23	RECEIVED BY (SIGNATURE)			DATE	8						
		TIME 1110				TIME							
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)			DATE					SAMPLE COLLECTED SAME DAY AS RECEIVED	Y OR N	
		TIME				TIME	SAMPLE(S) TEMPERATURE UPON RECEIPT	_____ °C					
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)			DATE	CHILL PROCESS STARTED PRIOR TO RECEIPT	Y OR N					
		TIME				TIME	SAMPLE(S) RECEIVED ON ICE	Y OR N					
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)			DATE	PROPER BOTTLES RECEIVED IN GOOD CONDITION	Y OR N					
		TIME				TIME	BOTTLES FILLED WITH ADEQUATE VOLUME	Y OR N					
RELINQUISHED BY (SIGNATURE)		DATE	RECEIVED BY (SIGNATURE)			DATE	SAMPLE(S) RECEIVED WITHIN HOLD TIME(S)	Y OR N					
		TIME				TIME	DATE AND TIME TAKEN FROM SAMPLE BOTTLE	_____					