

# The City of Lafayette Water Works Plant Annual Report 2022



*Ron Hurst, Assistant Superintendent*

## **Lafayette Water Works Mission Statement**

The Lafayette Water Works is municipally owned and operated water Utility. It is our purpose under the direction of the Mayor, Common Council, Board of Public Works and Safety and Superintendent, to provide its customers with potable water, with adequate pressure, quality and quantity and to work with the Fire Department to maintain the fire hydrants and distribution system that provides fire protection to its customers.

To accomplish this purpose we will pursue professional ethics that promotes public health and safety, consumer confidence, customer service, responsible operations, preventative maintenance, accurate laboratory testing, reliable reporting and compliance with EPA and the Indiana Department of Environmental Management Regulations, AWWA Standards and other safety programs, showing fiscal responsibility to maintain the best user rate possible for our customers.

## *Steve Moore: Safety Officer for the City of Lafayette and Chairperson of the Safety Steering Committee*

As Safety Officer I am responsible for the enforcement of all City safety policies. As Chairperson for the Safety Steering Committee I preside over a Committee that is comprised of representatives from each City Department. We meet monthly at The Water Works Plant to discuss activity from Departmental Safety Committees; there we explore ways to prevent accidents to ensure the safety of all City Employees.

### **Mission Statement**

It is the mission of the Safety Steering Committee of the City of Lafayette to increase and maintain the commitment of employees in health and safety issues; to increase awareness that supervisors and employees are primarily responsible for the prevention of workplace accidents; to make safety activities an integral part of the City of Lafayette`s procedures and culture; to provide an opportunity for the free discussion of safety problems and solutions; to help reduce the risks of workplace injuries; and to help ensure compliance with federal and state health and safety standards.

## *Jay Schnebly: Chief of Distribution*

The Construction Department was able to assist other City Departments on many occasions in 2022. We help other departments with snow removal by plowing two routes on the North end. We also work closely with the Street Department during street paving to assure that we replace any broken valves or hydrants “before” the street is repaved. The Water, Street, Fire, Parks and Waste Water Departments have a long history of working together. In return, we have received help from them on any occasion that we have asked.

### **Distribution System Accomplishments for 2022:**

|                            |     |
|----------------------------|-----|
| Ⓢ Fire hydrants replaced   | 8   |
| Ⓢ Fire hydrants repaired   | 20  |
| Ⓢ Leaks repaired           | 45  |
| Ⓢ Broken mains repaired    | 75  |
| Ⓢ Retire old lead services | 16  |
| Ⓢ New services             | 183 |
| Ⓢ Side-taps                | 19  |
| Ⓢ 1” taps                  | 15  |
| Ⓢ Updated Meter pits       | 34  |
| Ⓢ Salt pumps               | 0   |
| Ⓢ Valves replaced          | 1   |
| Ⓢ Valves Repaired          | 5   |

### **Utility Locator**

Utility Locators perform an invaluable service for the Water Works and the City of Lafayette. They electronically locate the City’s water mains and mark them on the ground with blue paint/flags. The Utility Locators are also responsible for marking the City owned fiber conduits along Greenbush Street and Brady Lane with orange paint/flags. Without these locations there could easily be a large service outage to business and citizens of Greater Lafayette and surrounding areas. Locators also respond to emergency locates that are called in after hours and on weekends and holidays.

In house projects include; maintaining the map log conversion to the grid system, log new maps into the map logs and grid system, complete ARC GIS corrections, updating the fire system, placing fire hydrant marker sticks on fire hydrants that are not easily seen,

Utility Locators 2022 Accomplishments:

- Ⓢ Reviewed and logged into the system new maps
- Ⓢ Drew new maps for the Distribution System.

- ② Number of utility locates completed 15,652 with emergency locate requests and assisted contractors working in and around the city with locate information.
- ② Assisting Intra Water Works/Other City Departments.
- ② Continuation of the ARC GIS corrections .

### **Hydrant Flushing Program:**

Each year, 6 workers flush nearly 3300 fire hydrants in the spring and fall flushing programs. Flushing mains help to determine what is happening in the system and shows any buildup of iron or manganese in specific areas. This is also an opportunity to operate the hydrants to assess the need for maintenance or repair. A census of the hydrants is also made at this time, which allows updating of information used by other City Departments.

## *Jay Schnebly: Chief of Customer Service*

Our Customer Service Field Tech Staff has continued to meet the needs of our customers for the 2022 year. Social distancing is still part of our protocol and following guidelines from the City of Lafayette since the coronavirus is still with us.

During this period, it has never been more important to exercise patience and understanding for the people that we encounter. We are currently serving 30,196 water account customers. There were 14,748 service calls made by our Customer Service Field Tech staff. These service orders consisted of frozen meters, need readings, check for leaks, verify meter information, weekly checks to monitor water consumption, check for damaged equipment, application and finals for new and existing services, repair meter, replace antenna, zero consumption, replace meter, test meter, repair or replace lid or bell assembly, and replace dials or MIU radio read unit. We also disconnected 2,806 services for nonpayment.

We are now around 98% Neptune meter and are capable of collecting readings by either a tower or by a drive by unit. These Neptune meters have the capability of storing a 96-day memory that can be downloaded and with that give us a printout of the customer's usage to the hour. If a customer needs that info we can provide that for them in an email. At this time 8 towers that are in place around Lafayette are reading approximately 70% of our meters and are capable of informing the billing office if someone has a major leak going on.

Our Customer Service team also changed out 1,625 Sensus brand meters to Neptune R-900 radio read units. The Customer Service team consists of just 7 members. The Customer Service staff also serve in a support role for snow plowing, broken water main repair and hydrant flushing. During the warmer months we maintain lawn maintenance on various City of Lafayette properties to ensure an excellent reflection on our customers, and community.

## *Chuck Reynolds:*

### *Chief of Maintenance and Operations*

The Operations and Maintenance departments made significant strides during the 2022 year. Both Operations and Maintenance had to overcome vacancies due to retirements in both areas the previous year. We are still in the process of training our newer employees and working toward cross training both groups respectively. One area of cross training has consisted of some training by our system operators, assisting with flow meter cleaning, and cross training with lab duties. Shared housekeeping, pump hose repair, and programming have also had information shared. The Union street tower was cleaned externally along with the Plaza South tower. The Plaza South tower was given a fresh coat of paint improving the outward appearance and improving our corrosion control on the metal surfaces. The year prior we contracted the cleaning of the Fairgrounds tower, and internal ladder replacement. The Haggerty road tower was also cleaned and painted externally. These efforts have greatly improved the outward condition of the city's water towers in the distribution system. The work was contracted through Complete Restoration. The Water Works also contracted to have Heritage Painting clean and paint various metal surfaces on wells at Glick and Canal well field locations to aid in corrosion protection. This contract was terminated by the vendors request prior to completion. The remainder of this project will need to be completed by another vendor during the 2023 year.

We are approaching the end of three years since our last Sanitary Survey. In review of our punch list, we have completed all outlined areas needing upgraded work except for the remaining water wells that are yet to have painting and corrosion control applied. Ortman Well Drilling has performed numerous repairs and component replacements on our Glick well field. They also made significant strides using auxiliary power to repair and test the interceptor well located by Glick number five well.

Ortman drilling also reviewed our well records at my request, and drafted a report summarizing each respective well for pumping capacity and how much production has fallen by percentage. This will be a great modeling tool to help us keep our well fields operating with greater efficiency. I also requested quotes from MacAllister Cat to service, inspect, and repair the city's generator sets at Canal road, and Columbian Park Booster Station for emergency power needs. (APT) Advanced Power Technologies provides the necessary electrical panels for our Canal road operations. I have requested that they make an assessment of our equipment, and let us know if we would have needs for updated equipment, and commonly needed parts that we can retain in house. In addition we have received a quote from DeNora Water Technologies which is the builder of our sodium hypochlorite equipment that we currently use at our Canal road water plant to come and access the equipment and make suggestions for future maintenance and upgraded parts. This is the equipment we use to disinfect the water that is pumped in daily production.

This past year also brought the completion of the Murdock Park Booster Station. This has provided the city with an additional three million gallon underground tank storage. To the far south of our distribution system the city broke ground and has started the foundational stages of a new two million gallon water tower at Wea Ridge. This project is scheduled to be completed in the 2023 year. Additional achievements are outlined in the Maintenance, Operations, and Lab sections of this report. The Maintenance, Operations, and Lab staff team are listed in alphabetical order: Kyleigh Bollinger, Andy Craw, Jim Foster, Vern Grenat, John Hamilton, Holly Johnson, James Karger, Andrew Moore, Colton Moore, and Pat Schultz.

**WEA RIDGE WATER TOWER (UNDER CONSTRUCTION)**



**MURDOCK PARK BOOSTER STATION**



**MURDOCK PARK BOOSTER STATION**



**UNION STREET WATER TOWER**



**FAIRGROUNDS WATER TOWER**



**HAGGERTY WATER TOWER**



**PLAZA SOUTH WATER TOWER**



## *Pat Schultz: Maintenance Foreman*

### **Staff**

The Maintenance Department consists of one maintenance foreman and three maintenance personnel.

The main duties of this Department are to effectively monitor and perform maintenance on all the pumping equipment, recognizing small problems before they escalate to larger ones. We perform daily, bi-weekly, monthly, bi-monthly, quarterly, bi-annual, and annual testing on our pumping equipment, generators and the chemical feed systems. We tabulate the combined data to determine which wells and pumps are the best candidates for the Annual Well Rehabilitation Program. The data collecting, record keeping, presentation, and well maintenance forms have been acclaimed as the best in the State.

A preventive maintenance program is performed on all pumping equipment and chemical feed equipment, such as oil changes, greasing, calibration, and signal checking. The Maintenance staff also has the duties of Water Tower calibration, rinsing, cleaning and proper illumination and security testing.

Our staff also assists with security maintenance, installation of security lighting, repairing of motion detectors, testing of devices such as battery efficiency, and lighting devices. We are on call twenty-four hours a day, seven days a week. We have responded to calls such as SCADA malfunctions, pump motor problems, automatic valves not reacting properly, etc.

We have worked with the Distribution Department on repairing broken mains, unplugging water lines and repairing service line leaks. We have also assisted in helping the Customer Service Department in reading meters during severe weather conditions along with installing new water meters, snow plowing, and the flushing of all fire hydrants twice a year.

The staff also assists in the general up-keep of the Water Departments facilities, electric, plumbing, HVAC, and the buildings/grounds appearance.

The Maintenance Department goals are to provide a safe and continuous flow of quality water to our customers. Our thorough Well and Pump Testing, as well as our excellent preventive maintenance programs allow the Water Works Department to deliver the highest in quality and most cost efficient product to our customers.

This year we replaced fluorescent lights to LED at some locations at a substantial cost savings on lights and energy usage. The replacing of diaphragms within clay-valves, Well rehab, and new pumps as part of our continuing maintenance procedures

## **Inspections and Reports: Daily, Weekly, Bi-Weekly, Monthly, Quarterly, Annually**

- Wells and Pumps, Flow Meters, Electrical, Packing, Construction Preventative, Alignments, Towers
- Water Treatment Systems, Chlorine equipment,
- Electrical ~ Emergency Generators, Lighting & Batteries
- Tools ~ Inventory for Vehicles and Storage
- Calibration and testing Chlorine and Hydrogen sensors
- HVAC units

## **Wells, Pumps & Gen-Sets**

- Well rehabilitation on Glick wells #1,#4,#5
- Well Clay-valve diaphragms replacement Glick #1,#2,#4 and #5
- Changed oil, oil filters and fuel filters in all three Gen-Sets
- Cleaned all drain-back valves, and repaired/replaced in-operable units.
- Assisted with annual hoist inspections
- Changed motor oil at all wells
- Packing adjusted at all wells
- Repaired air relief and drain back on Glick #4 well.
- Replaced solenoid valve shut off at fluoride tank at Glick Station.
- Canal well motor removal and reset on well #1 and #6
- Replaced 3 fuel lines in Genset #1 at Canal.
- Installed new schedule 80 pvc piping for ammonia tank.
- Installed an underground chase for all chemical feed lines from main building to vault.
- Ran all new chemical feed lines from main building to vault.
- Overboard process of 14 wells to help determine well maintenance that may be need.
- Well #4 Glick re-enforced footers (10 yards of concrete)
- Painting of well platforms at Canal location.

## **Water Treatment Process**

- Cleaning of flow meter at Glick vault weekly and all pumping stations during the year and replaced flow sensor in vault at Glick Station.
- Replaced all chemical feed lines from Glick building to the vault.
- Maintain and repair as needed annually on Hypo-Generator like floats, wiring and salt motor and switches.
- Weekly well depth readings.
- Replaced waters softener drain tube from flooding.
- Installation of new scale for the day tank for Chlorine at Glick
- Installed a new chemical feed lines at canal for the chlorine.
- Repairs to Oracle tank and installation of new scale on the day tank at the Glick building.

- The next phase/physical installation, of the Chemical Feed Upgrade at the Canal plant, within the Operations Building. (2022-2023)

### **Water Towers/Reservoir**

- Maintain and repair Ethernet cables and connectors for communication for scada.
- Monthly tower inspections
- Maintain Security systems in towers/Reservoir.
- Replaced LED lighting on the exterior lighting fixtures Haggerty Tower and the Plaza Tower due to defective fixtures. (replaced at no charge to City of Lafayette)
- Replaced door sensors to security system at the reservoir.
- Repaired screen on north end of the reservoir.
- Maintain Fences at towers replacing fence barbs, strap anchors and gate hinges and locks.
- Drained and refilled Plaza water tower. (1 million gallons – 3 days to drain – 2 days to fill) in preparation for the tower to be painted on exterior.
- Plaza Tower – replaced strobe lighting fixture on the top exterior.
- Sweep floors in composite towers and clean out bugs in light assembly.
- Installation of new analyzers at the reservoir and within water towers
- Fill Lagoon at the Park upon request by the Parks Department

### **Electrical**

- Maintain and replace solenoids, micro switches, in vaults and pumps @ pumping stations.
- Replaced sump pumps in vaults at wells, vaults in pumping stations
- Changed out more standard lights to LED in Buildings.
- Maintain and repaired or replaced security keypads, sensors and security lock systems.
- Maintain and repair or replace components on emergency lighting as needed.
- Maintained and replaced components as needed on North and South automatic gates.
- Repair locating devices as needed and some circuit boards on other devices for locator dept.
- Installed wire chases to protect wires from damage on magnetic contactor for security system door and jamb on steel water towers.
- Maintain and repair HVAC system components that can be legally be done.
- Repaired gateway for reading water meters at fire station #7 and it had water in it. There was no internet and found module to protect the circuit board was open, so it was replaced.

## **Building Maintenance**

- Installed new eye wash stations within the Glick building.
- Installed new LED fixtures in the shipping and receiving building on exterior.
- Regular custodial cleaning of the Operations building
- The sanding and repainting of all interior metal doors and frames.
- Router out and cleaning of all floor drains within the Glick Building.
- Replaced filters and cleaned AC units at all facilities
- Changed oil in all air compressors
- Keeping sidewalks and entrances safe at water works locations during the winter
- Maintain all UPS backups at water works.
- Repair door locks and door handle on water works building and gates.
- Repair roof leaks on ladder roof systems on water works buildings.
- Repair window actuators on water works buildings.
- Repair HVAC systems on some boiler and electric and gas heating systems.
- Ran 5G wire to assist Mulhaupt in Security system upgrades.
- Removed all unwanted landscaping in and around exterior of Administration building and put new rock.
- Performed maintenance and repair on security systems on water works buildings
- Murdock pumping station was turned over to Water Works. Maintenance division Covers all VFD, 5 pumps, HVAC, electrical, plumbing, etc.
- Columbian Park remove and install new security cameras.

## **SCADA**

- Provide maintenance on SCADA system and repair during the year.

## **Irrigation Maintenance**

- All irrigation assigned to this department, is turned on in the spring and turned off in the fall.

## **Misc.**

- Counting of the inventory in purchasing area.
- Assisting in the United Way Luncheon set up and clean up and tear down.
- Graffiti removal from various areas within the City of Lafayette.
- Mowing and landscape of all Water Works properties.
- Moving of vehicles to and from Fleet Maintenance vehicles.
- Participate in the city wide snow plowing schedule

## *Andrew Moore: Operations and Lab Foreman*

### **STAFF**

The Operations Department consists of one Operations & Lab Foreman, four System Operators, and one Lab Technician. The Foreman and Lab Technician retain WT2 water treatment licenses as well as DSL large distribution system licenses. There has been considerable turnover in this department over the past year due to retirements and all of the current system operators are obtaining experience over time before they qualify to sit for their licenses.

### **Service**

We provide service twenty-four hours a day, seven days a week, with assistance of an 'on-call' person. We received at least 1705 service calls in the year 2022, which averages out to 142 calls a month. These calls occurred during nights, weekends, and holidays, and consisted of turning on water service, changing out water meter chambers and screens, thawing frozen meters, and much more. There are emergency service requests that we respond to consisting of everything from broken mains, water pipe breaks in homes and businesses, and fire hydrants that have been broken off by vehicles, etc. We also assist the Customer Service Department, Distribution Department, and Maintenance Department here at the Water Works, plus assist the Police, Utility Billing, Facilities Maintenance, Parks, Water Pollution Control, and the Street Department when they are in need of assistance.

### **Quality**

We perform, at a minimum, two rounds of inspections and tests per eight hour shift to ensure water quality and to ensure proper water treatment process operation at Canal Road Well Field, Glick Well Field, Columbian Park Booster Pump Station, and Murdock Park Booster Pump Station. Cl<sub>2</sub> readings are taken at two remote locations within the city and all 14 wells and 11 booster pumps are inspected for proper pumping operation. Building maintenance/upkeep is a large undertaking and we make sure janitorial responsibilities are met, painting is kept up, and everything is in good repair.

We monitor, with the assistance of our Supervisory Control And Data Acquisition (SCADA) system, the water levels in our (1) five million gallon enclosed reservoir located at Columbian Park, our (1) three million gallon underground reservoir located at Murdock Park, our (1) two million gallon elevated water tower located at Haggerty Lane, and our (3) one million gallon elevated water towers located at Union Street, Fairgrounds, and Plaza South. The system will alarm when a problem occurs with high/low water levels, well and pump failures, electrical power failures, and security. If

the operator is away from the office the SCADA system will send notifications to a smart-phone carried by the operator to let them know about problems as they occur.

### **Security**

On a daily basis we provide a level of security at all locations making sure the areas are well lit and locked. We ensure security systems at each of our locations are working properly by logging into a smart-phone application and making sure they are armed and ready at the end of each day.

### **Aim**

We in Operations are dedicated to moving the City of Lafayette Water Works Operations Department forward in giving our customers the best quality water possible by keeping up with Federal and State regulations, streamlining our processes for better efficiency, providing the customers the quantities of water needed by maintaining suitable water levels, assisting with keeping our production of water up, and improving and updating our water system's security from attack.

### **Summary**

- Worked with Bowen Engineering and Wessler Engineering during the construction phases of Murdock Park Booster Station as well as testing and eventually putting the station into service within our distribution system.
  
- Worked closely with Frakes Engineering on the design and implementation of SCADA controls and automation for Murdock Park Booster Station.
  
- Worked with Water Works purchasing manager on getting quotes and purchasing tanks and equipment for the Canal Road chemical feed upgrade project. This was a large undertaking that required considerable measuring and planning of the spaces that this equipment would eventually be installed.
  
- Worked with Water Works Maintenance on the installation of new equipment for the Canal Road chemical feed upgrade project. This is an ongoing job that is expected to be completed within the first quarter of 2023.

# *City of Lafayette Water Works*

## **2022 Usage Report**

| <b>MONTH</b>           | <b>GALLONS PUMPED</b> |                      | <b>TOTAL</b>             | <b>GALLONS</b>       |
|------------------------|-----------------------|----------------------|--------------------------|----------------------|
|                        | <b>CANAL</b>          | <b>GLICK</b>         | <b>CANAL &amp; GLICK</b> | <b>REPUMPED</b>      |
|                        |                       |                      |                          | <b>PARK</b>          |
| January                | 204,557,862           | 68,255,191           | 272,813,053              | 171,774,052          |
| February               | 146,998,784           | 105,267,687          | 252,266,471              | 152,147,887          |
| March                  | 8,989,579             | 0                    | 8,989,579                | 180,414,365          |
| April                  | 235,158,160           | 28,619,771           | 263,777,931              | 182,484,763          |
| May                    | 182,198,914           | 135,238,029          | 317,436,943              | 196,381,521          |
| June                   | 245,788,392           | 124,943,948          | 370,732,340              | 240,571,010          |
| July                   | 248,611,009           | 147,239,029          | 395,850,038              | 256,168,797          |
| August                 | 176,276,004           | 200,524,608          | 376,800,612              | 208,793,934          |
| September              | 139,356,365           | 203,232,596          | 342,588,961              | 129,656,433          |
| October                | 100,994,079           | 262,606,402          | 363,600,481              | 89,128,740           |
| November               | 62,353,451            | 253,629,339          | 315,982,790              | 66,325,573           |
| December               | 66,314,993            | 78,365,444           | 144,680,437              | 66,915,984           |
| <b>Yearly Total</b>    | <b>1,817,597,592</b>  | <b>1,607,922,044</b> | <b>3,425,519,636</b>     | <b>1,940,843,059</b> |
| <b>Monthly Average</b> | <b>151,466,466</b>    | <b>133,993,504</b>   | <b>285,459,970</b>       | <b>161,736,922</b>   |
| <b>Monthly Minimum</b> | <b>8,989,579</b>      | <b>0</b>             | <b>8,989,579</b>         | <b>66,325,573</b>    |
| <b>Monthly Maximum</b> | <b>248,611,009</b>    | <b>262,606,402</b>   | <b>395,850,038</b>       | <b>256,168,797</b>   |

# *City of Lafayette Water Works*

## **Production Report**

| Year | Annual<br>Pumpage Canal | Annual<br>Pumpage Glick | Total Annual<br>Pumpage | Daily Average | Maximum<br>Day<br>Pumpage |
|------|-------------------------|-------------------------|-------------------------|---------------|---------------------------|
| 2017 | 1,714,575,000           | 1,555,369,000           | 3,270,217,000           | 8,959,498     | 15,880,935                |
| 2018 | 2,346,018,700           | 1,036,479,100           | 3,382,497,800           | 9,267,117     | 13,043,083                |
| 2019 | 1,634,013,348           | 1,543,134,543           | 3,177,147,891           | 8,704,515     | 13,943,810                |
| 2020 | 1,918,757,277           | 2,049,401,361           | 3,968,185,638           | 10,871,741    | 17,516,140                |
| 2021 | 2,353,014,146           | 1,750,395,809           | 4,103,409,955           | 11,242,219    | 16,693,444                |

## Water Works Laboratory

### Wellhead Protection Program

As part of the Well Head Protection program, wells at the Canal and Glick well fields and the adjacent old City Golf Course are sampled and tested for volatile organic compounds. Nine Canal & five Glick production wells are tested once a year. Forty-one monitoring wells are tested annually or more times for volatile organic compounds at the old City Golf Course. Samples are sent to independent certified labs for analysis.

As the Water Works Lab Technician, we keep updated files of all WHP test results, updating and comparing results monthly. We also complete monthly IDEM Reports.

### Lead and Copper Project

In 2022, 30 homes were tested for lead and copper. As in the past we organize and supervise this program, communicating with a certified chemistry lab. We also supply residents with preserved sample bottles and collect paperwork. Results are reported to IDEM and test results are mailed to all residents.

**Results:** Ninety percent of samples were at or below:

| <b>2022</b> | Lafayette  | EPA'S Maximum Allowed |
|-------------|------------|-----------------------|
| COPPER      | .389 mg/L  | 1.3 ppm               |
| LEAD        | < 1.0 ug/L | 15 ppb                |

Lafayette adds a specially blended polyphosphate designed to minimize corrosion scale, and red water conditions (Iron). Since we continue to be in compliance with State and EPA lead and copper regulations, we have been granted "reduced monitoring" status for the upcoming years, testing once every three years.

### Consumer Confidence Report (CCR)

2022 was the 25th year for the annual water quality report for customers or "Consumer Confidence Report. The finished report contains water quality information and testing results, including charts explaining the presence of any man-made or natural chemicals, minerals, etc. Information is also supplied to the Town of Dayton. Even though they purchase water from us, they still need to create their own CCR Report. The report was approved by IDEM, mailed out with water bills and posted on the Internet.

## **Bacteria Testing in the Distribution System**

Public water systems must collect total Coliform samples at sites that are representative of water throughout the distribution system. This is done according to a written sitting plan approved by the commissioner. The monitoring frequency for total Coliforms for community water systems is based on the population served by the system. This requires Lafayette Water Works to collect 70 bacteria samples a month, derived from population base (59,001-70,000). We monitor within the outer boundary of the system monthly. These samples are sent to a State Certified Lab, and tested for Total Coliforms. The test results are faxed to IDEM within forty-eight hours, and are kept on file.

## **Other Duties**

- ② Oversee daily operation of lab and equipment
- ② Keep inventory and order supplies
- ② Prepare reagents
- ② Keep accurate, up-to-date records
- ② Keep up on current and proposed regulations
- ② Create new report forms, charts, graphs, etc.
- ② Quality control tests
- ② Responsible for various reports:
  - Monthly Report Operations(MRO)
  - Daily Lab Report
  - Lead and Copper Report(Pb-Cu)
  - Consumer Confidence Report(CCR)
  - THM's & HAA5 (Trihalomethanes-Haloacetic Acids)

## 2022 Water Sampling and Analysis

| TEST                                       | SITES   | FREQUENCY                      |
|--|---|--------------------------------|
| <b>Lead and Copper</b>                     | <b>Residents' homes</b>                       | <b>30/ Every three yrs.</b>    |
| 42 Volatile Organics                       | Individual Canal and Glick Wells, WHP as well | Several times each year        |
| 42 Volatile Organics                       | Canal and Glick Entry Points                  | 2nd Qtr. Only. ( Waiver)       |
| Bacteria Samples                           | Distribution System                           | 70/ month—840 in 2022          |
| Alkalinity, pH, Phosphate, Temperature     | Distribution System                           | 10 sites at least 1X year      |
| 13 Inorganics                              | Canal and Glick Entry Points                  | Waiver/ Every three yrs.       |
| Synthetic Organic                          | Canal and Glick Entry Points                  | Reduced monitoring             |
| THM's /HAA5                                | Distribution System                           | 4 / Sites per Qtr.             |
| Combined Chlorine, Phosphate, Fluoride, pH | Canal and Glick Entry Points                  | 4X Daily (by System Operators) |
| Nitrates                                   | Canal and Glick Entry Points                  | Yearly                         |

## *John Burks & Rick Ross: Public Works Inspectors*

The Inspector for the Lafayette Water Works Plant is responsible for hydrostatic, bacteria testing and facility inspections. These duties are performed according to a set of guidelines to assure that all new water connections are done according to City Standards.

- Ⓢ Performed 30 Hydrostatic tests
- Ⓢ Performed 169 Bacteria tests
- Ⓢ Performed 0 Well Separation inspection
- Ⓢ Attended 8 Preconstruction Meetings
- Ⓢ Reviewed new maps
- Ⓢ Inspected and checked right of ways on 143 fire hydrants
- Ⓢ Performed 518 site and facility inspections
- Ⓢ Performed 63 meter and meter pit inspections
- Ⓢ Performed 12 Hard flush on Fire lines
- Ⓢ Assisted with utility line locations
- Ⓢ Assisted Construction and Meter Department crews
- Ⓢ Filled 16 systems
- Ⓢ Witnessed chlorination 20
- Ⓢ Witnessed de-chlorination 23
- Ⓢ Assisted Customer Service as needed
- Ⓢ Flushed system 70
- Ⓢ Attended Training Events 4
- Ⓢ Turn off 157 / Turn on 1178
- Ⓢ Valve located / repaired 11
- Ⓢ Painted Fire Hydrants 0
- Ⓢ Check for leaks 7
- Ⓢ Located Mains 3

## *Joe Davenport: Backflow/Cross Connection Inspector*

The Backflow/Cross Connection Inspector is responsible for tracking the annual backflow test results for all backflow devices in the City of Lafayette's potable water system, performing annual site surveys to identify any new hazards at a facility, assist in identifying the appropriate backflow device(s) required in new construction, tracking the annual gauge calibration certificates for all backflow testers who submit results and helping with continuing education of local backflow device testers.

- ④ Performed 16 Site Surveys
- ④ Performed 311 Inspections
- ④ Helped Water Facility Inspectors as needed
- ④ Delivered 2 Notices to Install backflow assemblies
- ④ Performed 4 Well Separation Inspection
- ④ Delivered 20 Notices to Test backflow assemblies
- ④ Helped to log and file incoming maps
- ④ Filled in for our Utility Locators as needed
- ④ Made corrections to ARC/GIS and MyGIS manager online mapping
- ④ Continuing to verify fire line sizes for our Utility Billing Dept.
- ④ Continuing to update and maintain our online Database of Backflow assembly test results through BSIonline and in our Laser fiche system
- ④ Oversaw Irrigation startup, winterization and maintenance
- ④ Assisted with Fire Line Inspections at City Buildings
- ④ Conducted Water Works staff training on MyGISmanager application and mapping
- ④ Covered several Operation's Shifts
- ④ Conducted Water Works Cross-Training Presentations
- ④ Attended ADA Meetings